ARCHITECTURE

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This is an experiment—

The world seems at the moment to be going through a process of unusually rapid change. Perhaps the architectural profession is doing likewise. The activities of the practitioner in Boston must be quite unlike those of his fellow in, say, Galveston, as well as quite unlike his own practice of several years ago. Suppose, then, we select a Guest Editor from a city of a certain size and see what he would like to find in his professional journal. What he wants will probably be what is desired by architects in other cities of the same approximate size. Suppose we present him with a sixteen-page section of the magazine, to fill as he sees fit. What he himself wants to see in these pages he will put there; there are no restrictions imposed. Readers, we abdicate in favor of our Guest Editor.—EDITOR.

CHARLES DANA LOOMIS, A. I. A., *Guest Editor*

Is This a New Deal or a Raw Deal for Architects?

WHAT SOME ARCHITECTS ARE THINKING ABOUT THE PRESENT AND FUTURE OF OUR PROFESSION.

AN ATTEMPT TO BRING UP, WITH A DEPTH BOMB, FRAGMENTS OF OPINION FROM THE ARCHITECTURAL WATERS OF SIX AMERICAN CITIES:

BOSTON . PITTSBURGH . CLEVELAND . ST. LOUIS . SAN FRANCISCO . BALTIMORE

THE Guest Editor has had it put up to him by the legitimate incumbent to find out as much as he can as to what goes on in the minds of the architects about their immediate outlook, and incidentally whether or not they like this sort of thing in their journals.

Years ago in New York, leaders in the profession stated to us as axiomatic, that architects never read but simply looked at pictures. We are now guessing that circumstances beyond their control have forced architects into a new frame of mind, and that they now are clutching at all the straws of information and thought that come within their reach.

The reaction to this experiment should show whether or not the architect still is, as the layman thinks, a recluse and a technician, or has stepped down into the hurly-burly of everyday life.

The six cities here grouped for exploration were selected, not by this writer, but by the real occupant of the Editor's chair in which we now are wobbling. We suspect that behind his choice lie the sharply cut statements of the Federal Census, which places this group of cities, within their legal boundaries, in the same population group, and leads the unwary to think of them as commensurate in "size." How dissimilar these cities are as architectural units has developed from the stories of the six men who have been drafted to report for their home towns, and without whose generous help this experiment would have died aborning.

ARCHITECTURE's chief scout burst in upon each of these gentlemen by means of a letter, written not so much in a spirit of intelligent inquiry, as with a malicious intent to arouse in its victims an uncontrollable desire to destroy its untenable positions by a bombardment of true facts. The patience and good manners of the recipients have been a confirmation, if confirmation were needed, of the tradition for tolerance and good breeding belonging to our calling.

Here is the provocation for the very interesting series of letters which is our real excuse for using all this space:

A letter on ARCHITECTURE'S letterhead sent by the Guest Editor to the men whose replies and comment follow:

The Editor of ARCHITECTURE has asked me to formulate, as far as I can, the immediate problems which are peculiar to the architects in the cities of over 500,000 and less than a million people. To make this at all possible I am asking him to place before representative men in Cleveland, St. Louis, Boston, Pittsburgh, San Francisco, and Baltimore, this statement of one architect's questions, with the request that each man write to me his reactions and suggestions as to the problems and their solutions.

In what way do the problems of architects in our group of cities vary from those of a metropolis, or from those of a more compact and better integrated city in the smaller population groups? First, as to the metropolis, it would seem safe to say that the opportunity for a varying range of practice, from the one-man office to the twenty-man organization, is much more sure and constant. By the same token, the number of big offices attracts to the metropolis a large and usually excessive population of "assistants" with superior qualifications and ambitions. Employers have a surplus of employees to choose from, and the standard of technical help is high. The wide range of office sizes also gives us a great variation in the qualifications, prejudices, and social background of the architects themselves. Because of the number of large-scale projects, the promoting type of architect is in good demand and is likely to become the dominant factor in professional activities in a metropolitan city.

In our big "little" cities the case tends much more nearly toward an equivalent practice for all. Assistants are not so well qualified, but most commissions are not of great size, and the offices tend to be more of one size, with two to five men in normal times. Architects tend to be more of one kind with more nearly one point of view. The professional societies and other activities are less in danger of domination by a powerful group of "big fellows." Unity of action is easier and architectural opinion is more quickly focussed and made effective.

On account of these conditions, plus the median cost of living and practising, we find a scale of fees accepted by our public in the main lower than that of the metropolis, but higher than that in the smaller city, where the architect is still fighting for recognition, which his lack of numbers and organization makes difficult of attainment. So much for the conditions under which we *have* worked. Now for the new clouds on the horizon.

First in the picture comes new work. What are its probable sources? Private clients, the mainstay of most of us, are practically in the discard. Financing for them has become impossible. Corporate bodies, building for use or investment, are rapidly becoming insolvent or parts of national organizations, and where they function at all they are likely to take orders from the nearest metropolis. Public work, in so far as it is in the control of local political forces, will remain for us who are first on the ground and local voters, but will only be available in so far as the taxable basis of our cities and states allows plant investment by the authorities. Here enters political policy which seems subject to sudden and unpredictable changes. Federal public work is also a factor, but here again the volume of such work is the result of policies from Washington, more unpredictable than those of the local governments, and infinitely more changeable. The net result is that *if* this or that occurs in the field of government, our field of labors may increase to normal, or continue to dwindle. Doubt leads to prophecy that decrease of activity is more likely for the near future than increase.

What about our business relations with these various potential clients? Codes which are protecting industry against a "buyer's market" bid fair to be a weak reed for the architect to lean on. He is caught between the upper and nether millstones. Even the NRA, which insists that nothing shall be sold below cost, neither can nor will insist that architectural costs be based on fixed items of service only, and that we can rightly refuse to assume responsibilities for which we are not paid. Particularly in governmental work, both Federal and local, there seems no protection against a constant increase in technical responsibility and detailed service, unaccompanied by reimbursements for the added costs which are inevitable.

What about competition? We can be perfectly sure that in nearly all our cities there are too many architects for the available projects of the year 1934–35. We have no recourse but to compete for this work. On what basis is this likely to be done? Is it going to be a question of price, service, or personality or reputation? So far local government work rests on personality or on reputation. Federal work is moving in the direction of speed and organization, and this whole picture is developing along the lines of consolidation to show efficient and speedy service based on reputations already made, and now combined effectively. This certainly puts it up to the individual operator pretty stiffly. Only where the latter commands the ear of important financial and industrial groups, national in scope, is his field of operations safe.

What about promotion by the architect? Can he continue to command a clientele, or must he create the jobs and sell them to a potential owner?

Does the tendency to combine and consolidate offices result in the reduction of employed personnel? Our offices have been in the past none too efficient. Will not added efficiency result in real technological unemployment for the draughtsmen?

Is large-scale housing a live issue? Can sites be procured which are suitably located, of a possible price, and not result in "development" instead of rehabilitation? In other words, must the architect go on playing a minor but vital part in the processes that create urban blight?

To what degree is it the practice of reputable architects in your city to work for speculative residential builders who put up houses for sale? Does this practice tend to weaken or strengthen the profession in the eyes of the public?

Can the architect do anything to assist in obtaining credit for building operations? It would seem that architects should combine to survey and report on the market for new buildings and improvements, in a concrete and detailed way, and establish a factual basis for a demand for their services. Has any survey of the building market been undertaken by the architects in your city? It is understood that this probably has taken place with reference to low-rental dwellings, but all fields of building supply and demand ought to be examined in detail to prove any case for the architect.

Is there any field for urban dwellings in your city, or has the combination of good transportation, smoke, noise, dirt, and high land costs, driven householders to the outer fringe of the city?

Is collaboration with real estate interests in this work feasible in your city, or are the architects being given the cold shoulder by the real estate group, and looked upon only as employees of that interest?

Do the financial interests of your city consider that architects should have any direction of projects from their inception, or that they should be employed and entirely controlled by the financial group behind the project?

[These answers need no comment nor editing.]

CLEVELAND

Philip L. Small, A.I.A.

CLEVELAND proper has a population of slightly less than a million, but the actual city, disregarding corporate limits but including the area which is one continuous, completely urbanized and densely populated area, has a population of over a million and a quarter.

Furthermore, within a radius of seventy-five miles, there are the following large industrial centres of considerable wealth:

Akron	208,000
Canton	87,000
Youngstown	132,000
Alliance	21,000
Ashtabula	22,000
Barberton	18,000
Cuyahoga Falls	11,000
Conneaut	10,000
Painesville	10,000
East Liverpool	21,000
Elyria	21,000
Findlay	17,000
Lakewood	71,732
East Cleveland	40,000
Cleveland Heights	51,000
East Youngstown	11,000
Mansfield	27,000
Lorain	37,000
New Philadelphia	10,000
Niles	13,080
Salem	10,000
Sandusky	22,897
Steubenville	28,508
Warren	27,000
Wooster	10,000

—all of which furnish a considerable volume of business to Cleveland architects, and give Cleveland a much more metropolitan character than St. Louis, for example, which by the same census figure, has only five Missouri cities with over ten thousand in population within a radius of one hundred miles, which five cities totaled in 1920 only about 68,000 as against a million for the cities within a similar radius around Cleveland.

Buffalo, San Francisco, Cincinnati, Baltimore, Boston, Detroit, Pittsburgh, Los Angeles may all be analyzed from the above angle, as well as many others and be found to vary from each other in conditions of practice much more than mere listed population figures would indicate.

Though Detroit shows a much larger census rating than Cleveland, and does not seem to be included in your list of big "little" cities, it has much more in common with Cleveland in the practice of architecture than do any of the cities grouped with Cleveland on your list. Los Angeles, though it shows a much higher census rating than Cleveland, has had to take in a large area in order to do so, and in actuality is more of a size and has much more in common with Cleveland and Detroit than with New York, Chicago or Philadelphia. I have just returned from a visit to Los Angeles, where I have many friends in our profession, and I am convinced of the above statement.

I believe that a study in any detail of the problems of architectural practice would result in a grouping somewhat different from the one suggested.

To make a broad grouping which would show many common problems within each group, I would put New York and Chicago in one group, Boston and Philadelphia in another, and all other cities of over 400,000 in the third. New York and Chicago are decidedly units apart in every phase of the practice of architecture as in many other things.

These two tremendous metropolitan centres, by their very size and wealth, have developed conditions of practice and points of view which have nothing in common with those of the rest of the country—nothing in common with the problems of practice imposed by the other hundred million good Americans. Furthermore, and parenthetically, the New York practitioner (not alone in architecture) cannot even understand the problems confronting the rest of the country. We have in Cleveland, as you doubtless have in Baltimore, more than one concrete example of that lack of understanding and our professional periodicals are continually giving evidence to the fact. And, still in parenthesis, there is little doubt that the disgraceful fiasco of our low-cost housing and slum clearance during the past year is due, at least to some extent, to the locale from which our recent friends were chosen. In all of my contacts in that quarter I failed to find even a very serious desire to understand anything but New York and Chicago. Possibly the atmosphere of Federal bureaucracy was responsible for the vacuum so noticeable to one from the "country." At any rate they won the game of Nullo. But my parenthesis is overlong.

Philadelphia and Boston have less in common with our own city, at least, than have any or all of the other cities outside of New York and Chicago. Cleveland in its business potentialities *is* a metropolis of about two million and, as I said before, has more in common with Detroit and Los Angeles than with St. Louis, Pittsburgh or Baltimore. On the other hand, it has much more in common with the latter three cities than it can ever have with New York or Chicago.

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The foregoing may seem beside the main point and an over-emphasis on a matter of little importance. It is necessary however to an understanding of some of the points I shall discuss later and which may seem surprisingly at variance with what you encounter in Baltimore.

Referring to the third paragraph of your letter of May 2: In Cleveland we have had a very wide variance in office size, character of practice, social background and point of view.

Walker & Weeks have had the largest office in the city for fifteen years, having built up a large practice chiefly in bank buildings, covering the area above referred to and beyond. Their office, until 1930, averaged perhaps seventy men and at peak periods ran over a hundred.

Hubbell & Benes, doing chiefly larger work, fluctuated considerably but occasionally I believe ran as high as thirty or forty men.

Small, Smith & Reeb (then Philip L. Small, Inc.) had averaged for a number of years about fifty men, at no time in recent years employing less than thirty, and during '28, '29 and '30 running a steady payroll of over sixty.

Warner & Mitchell; Garfield, Stanley-Brown, Harris & Robinson; Howell & Thomas; Alfred Harris for a few years, all averaged more than ten men, and at times double or treble that number.

From there the offices scaled down to the many small offices doing small residence work without employed personnel.

In addition to the above strictly architectural offices, we have The Austin Co. and The H. K. Ferguson Co., doing a very large international business in architectural engineering and construction, along standardized unit type, but occasionally encroaching upon the strictly architectural field.

This has given us a rather large draftsman population, both fixed and floating. Today we have four hundred on our unemployed list.

Large, well-organized offices, of a rather metropolitan character, furnish better than average training and keep within our own area a large number of men of good training and ability. What those offices will be in the future is, of course, very problematical.

The scale of fees varies as much as the size and character of the practice. It averages much lower than in New York, but is quite similar to Chicago.

Our larger offices operate on the larger work on a 6 per cent base fee with, in some special types of single-purpose buildings, additional fees for mechanical work and special interiors. The larger offices do practically no residence work, and what they do (out of courtesy) they lose money on at 10 per cent.

There are several excellent smaller firms in the residence field who have collected 7 or 8 per cent on residence work.

On the other hand, we have many small firms and individual practitioners whose fees have been more or less what they can get—but more on this subject later.

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The profession, in its influence in the community and its contacts with civic affairs, has for many years been dominated by a limited few "big fellows," as you put it. This is not only true in the architectural profession but also in engineering and throughout the building industry. Eight or ten men in our Chapter, as individuals, have had more influence in civic affairs than any quantity of concerted action by the Chapter.

This situation is gradually changing, as some of the former young men of the Chapter are growing older in years and reputation.

Don't misunderstand me; we have a fine Chapter and it has been for several years a well-knit, congenial group. But architects are either too temperamental or sensitive or ethical (or something) to make an influential business organization. Many have waked up during the depression and I am convinced that our influence in the community has been growing.

* * *

Now, as to new work: I think we will all admit that we are considerably overbuilt in every field except housing. For example, in the industrial field we have had in the past year or so several new industries come to us from other cities, and many new corporations formed within the city. All of these have been absorbed in vacant space, and at the present rate the existing vacant space can absorb all expansion of this kind for several years to come. The same is true of our commercial buildings of all kinds, except for the need of some small neighborhood commercial units at strategic points in newly populated areas. Many of our institutions are unable to finance the operation necessary to occupy all of their space. Our museums, non-profit societies, associations, etc., are all in bad financial shape, and one or two which had projected new buildings have definitely abandoned any idea of such expansion. With the present tendency on the part of Congress to soak the rich and reduce deductions for gifts, subscriptions for new building funds are practically out of the picture. Our Community Fund Campaign failed for the first time last year to make anywhere near its goal, and the collections on the campaigns of the previous two years have reduced the benefits to way below the needs of the community. I am convinced, therefore, that we can count on no institutional, commercial or industrial work for several years to come, and when it begins to come I am very much afraid that they will be handled on an entirely different basis from that in the past.

In the housing field our biggest shortage is in so-called low-cost housing and in the moderate-price range from $15,000 down. As to low-cost housing, I think we have sufficient cause to be somewhat sceptical of the benefits to our profession from the Housing Corporation, but possibly have reason for considerable optimism as to the benefits from the new Housing Act. This, of course, depends entirely on the manner of its administration. As to the moderate-priced private home, the new Housing Act, if properly administered, can produce a great volume of this class of work, but as we know from experience, unless houses of this price range come to an office *en masse*, they are a losing proposition. Renovizing, which is provided for in the new Housing Act, can also bring a considerable volume of business, but much of this will be done without the employment of an architect, and very little of it will be of a character to be profitable to an office of any size.

The building of larger homes is almost out of the picture until the market is stabilized at a higher level and financing money is available through private channels.

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As to Federal public work: My firm and Walker & Weeks are associated on a fifty-fifty basis and with joint responsibility on the new post office here in Cleveland, which is the only Federal project under construction or projected, except for nine small postal sub-stations which are being handled in the Treasury Department. The only municipal work requiring the employment of architects which has been under construction or is projected is the group of buildings for the Easterly Sewage Treatment Work, of which my firm are the architects. The first building was completed nearly two years ago and the completion of the remaining buildings is entirely dependent on Federal aid, which is now under negotiation, and will probably be granted within the next few days. Outside of these two public enterprises there will probably be nothing considered for several years to come, due to the status of the bonded indebtedness of both the city and the county.

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All of the above rather general inclusive statements are subject to sporadic exceptions. Here and there, there will be building operations necessitated either by unusual conditions or made possible by the unusually favorable financial position of the client, but such sporadic exceptions cannot be counted on to benefit any one architectural firm sufficiently to be a factor in its plans for the future.

You can see that I am not much of an optimist as to the next few years, and I think my lack of optimism is enjoyed by most of my confrères here in Cleveland.

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Now as to the conditions which may prevail in the acquisition and execution of the very meagre supply of work in the next few years: Our group here in Cleveland, generally speaking, has been very free from unethical competition in the past. We have enjoyed very pleasant relations within the Chapter, but, judging by the almost hysterical manner in which the majority of our offices have been stampeding into all kinds of hopeless promotion work, free sketches for every limited-dividend corporation that appeared on the horizon, etc., etc., in the past few years, I am not so sure but what the competition for the meagre supply of jobs will be anything but ethical, and we can't blame them any more than we can blame a drowning man for grasping at a straw.

If, as and when anything approaching a normal volume of work begins to appear on the horizon, the architects of standing who have still survived, I think can be counted on to conduct themselves on the high standards of professional practice that they have in the past, but if certain tendencies which we have seen growing in recent years continue to grow, there will be other factors affecting our practice far more serious than unethical competition among ourselves.

In the first place, I believe the NRA will operate more to our disadvantage than our advantage. I do not believe that if a general code for the construction industry, with individual codes for all of its elements, ever becomes an accomplished fact, it will be anything more than a detrimental hodgepodge. It seems to me that our own representatives in these negotiations have been exceedingly remiss in protecting our profession.

In the second place, there has been a growing tendency for our large corporations of national scope to maintain their own engineering departments and to handle all of their construction work without the employment of outside architects or engineers. This idea is gradually being borrowed by small corporations, and we find organizations—for example, the large rubber companies in Akron, such as Goodyear, Firestone and Seiberling — designing within their own organizations all of the super-service stations which they are now spreading across the country. Without legal restrictions against such practice, I think it will grow and reduce a very considerable architectural personnel, who might otherwise be in independent practice, to the rank of salaried employees.

In the third place, there has been a growing tendency for the large, well-financed general contracting concerns to enter into the promotion field and furnish architectural and engineering services along with their construction services. In most of such cases the architectural and engineering work is done by poorly paid salaried employees—more of our personnel deprived of their right to private practice.

In our own metropolitan area there has been a growing tendency on the part of the public to buy their houses, even very large ones running as high as a quarter of a million dollars, already built, which again puts the architect in the position of employee to the contractor instead of to the client. This has become a very serious problem in Cleveland and I will discuss it more in detail later.

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All of the above factors have contributed towards the conviction that there is a rather rapidly changing attitude on the part of the builder, promoter and user in obtaining his building, perhaps not like the purchase of an automobile or refrigerator, but at least to place all responsibility in the hands of one organization. This is further borne out by the very marked success and rapid growth of The Austin Co. and The H. K. Ferguson Co., who undertake to design and construct, even to the operation of their own steel fabricating plants, and turn over to the client a complete and efficient plant at a fixed price. The public has moreover discarded most of its extravagant ideas during the past four years, and will in the future not only be satisfied with more economical buildings, but will insist on very rigid economies, all of which furnishes ammunition to the type of operators just mentioned.

To sum up: My conclusions are, therefore, that, due both to the decreased volume of work and also to the above encroachments, there will be a livelihood for a rather small proportion of the architects who were in practice here five years ago. Some consolidations are bound to take place, but I do not believe that many of them will be permanent. Architects are individualists and cannot join for group activity unless they start it at comparatively early age. Some of our younger men have already found places for themselves in other lines of work, and I think that general business will revive so much sooner than the building business that many more of the younger men will find permanent places for themselves in other lines of activity.

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Now as to the work for speculative builders; this is a very major item in any discussion of the conditions of practice in metropolitan Cleveland. We have, as you know, a real estate development of considerable size and very high character known as Shaker Heights, developed and administered by the Van Sweringen Company and now a community of about 25,000 population. From the start of this operation, the Van Sweringen Company has not permitted the construction of any house not designed by an architect. Other real estate promoters, seeing the high character of the Shaker Heights development and the benefits derived from such rigid restrictions, have incorporated the same restrictions in their own developments, the result being that in any of our neighborhoods of high character no house can be built without the employment of an architect. Way back in 1910 the old Euclid Golf Course, a beautiful wooded area adjoining an already well established residence area of high character, was cut up into home sites by a rather enlightened and forceful operator, and he began the construction of a large number of very fine high-priced residences built for sale. Many of these sold as high as $150,000. As his property developed other operators came in and bought lots and built houses for sale. The success of that particular venture encouraged other builders to do the same thing when the Shaker Heights development came along, and it was in full swing only a year perhaps after the other development. The consequence is that from that start the practice of buying a home already built has not only become very firmly established, but it has naturally produced a very large number of speculative builders of very much better than average qualifications and standards.

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All but a few of the best of these speculative builders, requiring the services of an architect, have sought out younger men in the employ of some of the larger offices and have offered them anywhere from one to ten houses to design at a figure which to an employee looked like the golden opportunity to go into business for himself. As a consequence, we have had, year after year, many of our younger men, inadequately trained, with no understanding of the difficulties of maintaining an office or of building up a clientele, going into business for themselves on the strength of some group of houses for some speculative builder and thereafter finding themselves entirely dependent on that speculative builder or others for new work. This has, of course, put the speculative builder in a wonderful buying position, and five years ago, when I was president of the Chapter, it culminated in a very pathetic appeal from such young individual practitioners for some help from the Chapter out of their difficulties. Very few of them had had sufficient training ever to qualify for any work except that which they were doing, namely, running plan factories for speculative builders, and they were in a situation created entirely by themselves. However, the result was that the Chapter helped them to draw up a set of standards of practice, formed them into a luncheon club, and helped them to sell the speculative builders a standard schedule of minimum fees. It worked only to the benefit of the more able of the group, who were occasionally employed by the better builders; these builders generally employed for a full fee some of the residence architects of recognized standing. The big majority of these young chaps were still struggling for a way out when the depression hit them and wiped most of them out. A very few of them may find their way back into the larger offices, some of them may find their way back into practice because of the new Housing Act, but the majority, I feel, will permanently step into other lines of work. But the speculative builder is so firmly entrenched that I very much fear that the same situation will develop again in the future. A proper code or codes for the construction industry would, of course, have cured this situation for all time.

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To answer a few of the questions toward the end of your letter:—unless the larger offices get into some promotion work they will be lost in competition with the type of operator I mentioned above. Large-scale housing is still a live issue in Cleveland, and it is quite probable that about $9,000,000 will be spent here within the next year and a half, benefiting approximately forty men. There is no field for urban dwellers in our city, as the atmospheric conditions have gradually driven all who can afford it into their own homes in the suburbs. There has been in the past, and will continue to be, a certain amount of collaboration with real estate operators. Depending on the operator and also the standing of the architect, the relationship has been sometimes very happy and, in others, otherwise. Due to their lack of ability to furnish any construction loans, the attitude of the bankers of our community towards the architectural profession is not of any particular consequence at this time. However, there has been a very decided growing tendency on the part of the finance institutions to place more importance upon the architect's services in appraising the value of properties, and I am of the opinion that in the future the architect will play a very much more important part in the decisions necessary to the execution of a construction loan. It seems to be generally recognized that the situation in which the building-and-loan companies and many of the banks find themselves is due largely to their disregard of the architect and his judgment in placing their loans in the past.

PITTSBURGH

Harvey A. Schwab, A.I.A.

1. In what way do the problems of architects in our group of cities vary from those of a metropolis, or from those of the more compact and better integrated city in the smaller population groups?

Answer. Problem of practice in a city of the 500,000 class is essentially no different from practice anywhere else, except that competition with "metropolitan architects" must be met. General competition is really keener in metropolitan cities. Architects in the 500,000 city group need not be "promoters," but certainly should have knowledge of finance and its sources. That is an essential part of every architect's equipment. The scale of fees will be governed by the individual's ability, and the local scale of cost of living and of production of architectural services.

2. What are the probable sources of new work?

Answer. New work is going to be where we find it. The bulk of it will be private clients, or corporations, with some public work, if we can keep the governments out of competition with private practitioners. Work is decidedly not going to fall into our laps. It will have to be developed just as it always was. It must be borne in mind that a new clientele will have to be developed. Architects will have to develop relations with potential clients that will breed confidence. From that, jobs will naturally develop. As for proper remuneration for services, the codes will be of great assistance. We must impress the client with the *value* and *cost* of proper and adequate service. If they cannot be so convinced, they would be bad clients for us anyway. Of course, architects are duty-bound to contribute their time and energy to civic and public matters, as an obligation of a professional.

3. What about competitions?

Answer. They are decidedly out, and most unsatisfactory and costly to the client. We may have to consolidate our efforts. Co-operative groups should be more effective than single practitioners. Of course, this will reduce employment of draughtsmen, but this will simply force the unsuitable ones into other occupations for which they are better fitted.

4. What about promotion by the architect?

Answer. The architect should never "promote" in the usual sense of the word. He should, however, advance ideas and prove them out, and have available information leading to the financing of projects. The business of financial promotion is entirely outside his normal function, and he should limit financial activities to co-operation with finance agencies.

5. Is large-scale housing a live issue?

Answer. It should be, realizing that it is a long-pull proposition. The "housing experts" have failed to find the answer as yet. If the architects wish to register in this field they will have to find the realistic solution.

6. To what degree is it the practice of reputable architects in your city to work for speculative residential builders?

Answer. It is generally not done at all. Such builders use "private plans," or none at all. Under present conditions it seems dangerous practice. Group housing might be worked out, if we can control the financing agency sufficiently to have us retained by them.

7. Can the architect do anything to assist in obtaining credit for building operations?

Answer. I think so. We should be concerned also with the prevention of credit extension to bad projects. Credit agencies are in a receptive mood at the present time, for sound advice as to the safety of their future real estate investments. Now is the time to establish the architect as a sane adviser.

8. Is there any field for urban dwellings in your city?

Answer. To a limited, but increasing degree. The so-called "city house" has never taken hold in Pittsburgh, which has always been mainly suburban in character. This has increased the rentals in Pittsburgh, but has limited the blighted areas to a greater degree than in other comparable cities.

9. Is collaboration with real estate interests in this work feasible in your city?

Answer. I think so. We are just at the point of adding a real estate organization to our "Joint Committee." Later on this question can be answered more definitely.

10. Do the financial interests of your city consider that architects should have any direction of projects from their inception?

Answer. I do not know. That viewpoint has not been given a complete trial as yet. We propose to advance this policy in the next six months.

ST. LOUIS

Louis La Beaume, A.I.A.

LET me begin by saying that the immediate problems peculiar to architects in cities of over 500,000 and less than a million people are similar to the problems of architects both in larger and smaller communities. Our chief problem is due to unemployment. This means, of course, that many of us can't make a living, or even make enough to pay our bills. Previous to 1929 our problems here in St. Louis were, I think, in no way different from the problems of most urban architects. I think the profession was as much appreciated here in St. Louis as in New York City, or Boston, or Philadelphia, or Chicago. The better architects had their fair share of the better work; the vast majority were members of the Chapter and the Institute.

The Institute schedule of charges on the whole prevailed, though, of course, there were cases of competitive price cutting in some classes of work. The more intelligent people among our population recognized the fairness of the Institute's schedule. This group included our leading business men. There were those, however, in the business fraternity who strove, and will always strive, to drive hard bargains. The more intelligent a man is the more he comes to realize that he gets about what he pays for.

Real estate speculators here and everywhere have always been a pest, and they have fattened on the need of draftsmen and struggling young architects. I imagine this situation prevails pretty generally over the country, in cities of almost any size, but I have a sneaking suspicion that fees hold up better on the average, in cities of the size of St. Louis, than they do in larger places like Chicago and New York. I imagine that there is even greater price competition in the skyline cities, where promotion is rampant, than in the more level spaces.

Now there is no work, or practically none. The game seems to be over and, of course, competition has ceased. I do not mean, of course, that there aren't still some alert minds among us. Some of these alert boys who hear of a commission, or the possibility of a commission, go after it.

Now for your paragraphs:

No. 1. Can't answer this intelligently. Never could read the future, and anyway there is a law against fortune telling in St. Louis. Office-building occupancy here is way below normal. Every building in town is struggling to pay its interest charges; none are paying dividends. At the moment I can't think of a single hotel that isn't in receivership; apartments are begging for tenants; manufacturers are not increasing factory capacities; many private homes are for sale or for rent. Some small home owners have had their mortgage situation eased by the Government, others have been foreclosed. On the outskirts of the town there is some speculative building, but this is a phase of architecture too esoteric for me. What do you make of the situation just outlined? What's your answer? We have a new Federal building under way, sponsored by the National Government, and a new post office on the drafting-boards. In our own office we have just finished the new Municipal Auditorium, and the city has just voted sixteen million dollars, in bonds, for further public works. The bonds themselves have not been issued, because proper supporting taxes have not yet been provided for by the Board of Aldermen. We hope to get over this impasse within the next month, in which event we will have one million dollars for the completion of the large arena in our auditorium, one million dollars for the erection of a Soldiers' Memorial, one million dollars for the embellishment of the Memorial Plaza, six hundred thousand dollars for further work in connection with the Civil Courts Building, and ten or twelve million dollars for hospitals and other municipal improvements. To this sixteen million, one hundred thousand dollars, will be added a thirty-per-cent grant by the Federal Government, bringing the total contemplated expenditure for public works here up to about twenty-two million dollars. The School Board is also planning to spend some two million dollars within the next year.

At the same election in May, ten million dollars were voted for State public works. This item is expected also to carry a thirty-per-cent grant. The position of the private architect is not clear with regard to the expenditure of this public money. Here in St. Louis the items which I have specifically mentioned, such as the Municipal Auditorium, the Court House and the Memorial, will be carried through by the Plaza Commission, composed of a group of St. Louis architects. We don't know yet what the attitude of the City Administration will finally be regarding the balance of the program, including a good many hospital items. As professional men we disagree with the idea of doing important work, involving technical architectural design, in government bureaus.

No. 2. The general impression seems to be that codes do protect certain groups in the matter of costs. The architectural profession has no code, however, and the tendency of government, either Federal, State or local, to set up bureaus and hire draftsmen, must work to the demoralization of the architectural profession. It is a vicious system if allowed to exist side by side with the recognition of private enterprise in industry. It is plausible enough, of course, if the ultimate object is to sovietize the entire nation, but discrimination against any special group would seem to me unjust and unfair.

No. 3. Well, what about competition? You say that there are too many architects for the available projects during the next year. There is also a surplus of wheat in the country and an enormous surplus of productive power, yet millions of people are without the necessities, to say nothing of the minor luxuries of life, and America has always been famishing for good architectural design. Of course, when men are hungry they are going to claw and clutch at every available bone. This is competition. By the same token, hungry men can be exploited and made to accept work on dictated terms.

No. 4. I have never considered mere promotion as a proper function of the architect, or of any other professional man. There are, of course, graduations and qualifications necessary in a statement like this. The architect may point the way to society in certain developments, but this is social service and not commercial promotion.

No. 5. The tendency to combine and consolidate offices might well result in a reduction of employed personnel, but there are other factors to be considered which might make a categorical answer to this question difficult. Neither am I able to say that increased efficiency in office practice would necessarily result in unemployment for the draftsman. Of course, one good man may do the work of two or three mediocre ones. In this whole question are involved such factors as volume of work, proper scales of compensation and proper hours of employment.

* * *

No. 6. Is large-scale housing a live issue? Who knows? We don't seem to have gotten very far with Federal Housing, and most municipalities do not feel themselves in a position to do anything on their own. Neither have private investors been tempted, either by avarice or philanthropy, to enter this field.

No. 7. The use of the word reputable in this question makes the answer easier. I do not believe that reputable architects sell themselves to speculative builders to any great extent in St. Louis. If they do, the practice will, of course, tend to weaken the profession.

No. 8. Can the architect do anything to assist in obtaining credit for building operations? This is not the architect's primary function. The architect is not a banker, an investment broker, a real estate operator or a promoter. He cannot be any of these things and remain an architect. He offers to society his architectural ability and offers it disinterestedly as the lawyer offers his legal ability, and as the physician offers his medical ability. No other position is tenable for the conscientious practitioner of any profession. What America needs, and will always need, is the raising of professional standards and not the lowering of them.

No. 9. There is not a very great field for urban dwellings here. Neighborhoods change rapidly, and the tendency has always been to seek fresher and cleaner surroundings on the outskirts of the city.

No. 10. Collaboration with real estate interests is feasible, of course, where the real estate man recognizes the true value of the architects' services and respects his professional status. The cases of this recognition, however, are rare.

No. 11. This question is involved and is to be answered in the spirit of some of the previous questions. No client employing an architect should be expected to sign a blank check. He should, however, have enough confidence in the relationship established to rely on his adviser for proper service.

SAN FRANCISCO

Albert J. Evers, A. I. A.

THERE does not seem to be any great degree of difference in the range of practice between our medium-sized community and the larger ones, except that our very largest offices would probably never show more than thirty to forty employees, whereas we have heard of large Eastern offices employing from three to four hundred. Our offices, as a consequence, still retain the personal touch. The architect is still in close contact with the office and the drafting-board.

The men with the larger offices, strange to relate, take less active interest in professional organization affairs than the younger generation with smaller offices; more time, perhaps, and more urge to make the profession a better future sphere for themselves and their fellows. They (the older men) are willing to help when called upon but, far from dominating the picture, they are well satisfied to allow the smaller fry to carry the burden. The spirit is excellent, however, and we have very little quarrelling or internal strife. When real support is needed, all hands turn out and do their bit (after a bit of urging, perhaps).

Turning to the possibilities for future work, the general opinion here is that private work in volume does not appear possible for some time to come. There has been a very meagre amount of public work to keep the offices alive, and many have discontinued. A large number of architects and draftsmen are unemployed and in real need of charity in some cases. Any housing program with a provision for *architectural control* would help to solve the immediate problem, whether through large-scale developments by direct Federal action or by stimulation of private building.

* * *

Costs are rising, but we are not yet in a prohibitive market for building. The number of distressed home properties on the market makes any large-scale building movement rather doubtful, and it is a question in my mind whether or not the field of private building is restricted by those foreclosed bargains.

The constant improvements in the technique of building, equipment, and the requirements of codes, is placing a constantly growing burden on the architect. It is becoming necessary to seek special engineering services, or to devote an ever-increasing amount of the principal's time to technical problems which did not bind the practitioner of some years ago. For example, the so-called Field Act for school buildings, passed by the last California Legislature, requires that an analysis of the static forces of gravity and the dynamic forces of lateral earthquake shock, with their resisting designed structure, be submitted in detail to the State Bureau of Architecture for approval. The architect must sign an affidavit that to his personal knowledge the building has actually been constructed in accordance with the approved design. This entails such a tremendous amount of time and technical skill that the architects and structural engineers of San Francisco have petitioned the City Government for an increase in the time-honored 6 per cent, which will no longer cover.

* * *

Competitions? Let them be few and far between. Their cost to the profession as a whole is enormous; their effect on the public is detrimental to the architect. The winner is acclaimed. The other meritorious and probably equally satisfactory solutions are discarded and their authors are not helped professionally by their failure. No; competitions do not appeal to the majority here. We think they are too costly in the mass and give private owners the idea that architects spend their time mushing about, presenting competitive sketches for each small bungalow. We prefer an equitable distribution of work. (If only the political angle could be ironed out in public work.) For private work, it would seem that the devil must still take the hindmost.

* * *

Promotion by the architect has not been an entire success in our city. True, there have been cases where architects joined with others and a group has more or less successfully "promoted" a project. The outstanding promotional architects, as we have seen them, have not been a credit to the profession. The architects who have worked in close relationship to real estate offices have probably been offered ten duds to one successful venture. After the score is counted, they find that they have a large file of perspectives and sketches but very little real architectural practice. The profession has been dragged down by those who hold themselves too cheaply.

On the other hand, there have been several very noteworthy developments of residence subdivisions where beauty and success have been due largely to close and intelligent co-operation between the realtor and architect.

To return to housing and its possibilities for creating activity: we believe it is a very live issue. San Francisco has miles of old wooden buildings, huddled together in dreary rows. The community has been sold on the idea that the government might well demolish many blocks of fire-trap, blighted dwellings and replace them with new, low-rent apartments. This would improve the entire district by setting higher standards and providing an example of group development. It is feasible only by means of government grant and 100 per cent loan. Limited-dividend corporation housing schemes in blighted areas will not work out financially.

The idea of wholesale government loans to home owners, at low rates of interest, is an alluring one for the architect, but most people have too many debts already and will hesitate to negotiate new ones; since the rates proposed would be cheaper than rent, we will probably see the rental schedule drop to meet the competition, with a resultant destruction of values.

It all seems very paradoxical, like many other things today. As is true of other economic experiments, there can be no foretelling of the exact results of low-interest governmental loans for home building.

* * *

Taking a broad view of the matter of the architect's place in our community, it seems to me that he is gaining a more intelligent appreciation of his work, is taking more part in the general community activities, and is becoming more recognized as a technical expert whose services are necessary and valuable on all building work.

BOSTON—W. Roger Greeley

THE Guest Editor here is forced to take a part again. Mr. Greeley's communication was sent in the form of marginal notes on the letter sent to him. The reader will have to put up with the interpretation of these by the humble scribe.

Mr. Greeley's comments follow:

Private clients are not in the discard. They will still be the mainstay of the architect.

The architect must create the job and sell it to the potential owner.

There is in Boston very little employment of architects by speculative builders. Such a practice tends to weaken the architect in the eyes of the public. (We assume that Mr. Greeley interprets our question to mean that speculative building includes all buildings built for sale, regardless of cost or quality. The question was inspired by the condition in Baltimore referred to later, where fine houses from $15,000 to $75,000 have been regularly built for sale.)

Much work has been done by Boston architects in fact finding and reports on the condition of the low-rental dwelling field. (The report of the Boston City Planning Commission on the CWA project for slum survey, administered by the architects, is a very useful and complete document of the greatest value.)

The Boston householder has been permanently driven out of the urban dwelling areas, according to Mr. Greeley. The smoke nuisance, dirt, high land costs and rents, traffic nuisances, and available transportation, have forced a shift in the population to the perimeter of the city.

Real estate interests still look on the architect very largely as an exploitable employee of their activities. Only very rarely do they think of collaboration with architects as a desirable practice.

There is in Boston a well-informed group of financial men who value the early collaboration of the architect and make use of it.

* * *

BALTIMORE—Charles Dana Loomis, A. I. A.

INFORMATION from other cities can be no more complete than our informants make it. Here in Baltimore we have available plenty of data to give us the true picture of conditions.

In our group of cities Baltimore stands alone in that the census figures more nearly show its true size, than in the case of any of the others. It is the only true city in an agricultural State, and contains within its limits about half of the State's population. Considerably more than half of the people live within the "metropolitan district," and earn their living from the city pretty directly. Baltimore is without a hinterland of industrial towns.

The area of the city in 1900 was small for its population, and, compared to the taxes in the counties surrounding it, city taxes were high. Easy radial lines of travel made access to the perimeter quick and simple, and there was a steady and increasing shift of population over the borders into the counties. A ring of unplanned, uncontrolled, and usually jerry-built suburbs grew up around the city during the trolley-car age. Problems of street planning, extensions, sanitation, fire, water, and other public services became very acute. In 1919 Baltimore was forced into the annexation of a belt more than two miles deep around its entire perimeter. This doubled the area of the city without adding any commensurate population. The change from a rather congested little "walled" city to a large and thinly populated corporate area, with the little obsolete city still in its heart, was a golden opportunity to the jerry builder and a challenge to the authorities. The jerry builder won. The old city fed the new developments with its population, its life blood. It also fed the new areas with tax money for new streets, new schools, water and fire service, and all the utilities. The city's overhead swelled marvellously, though there was little compensating increase in population. Up went the tax rates and the tax bills to meet the new expenses. Urban land and improvements meanwhile were less and less desirable, and assessments on much old property did not decrease. The increase of motor travel at this time made the drain on urban land greater, and the promoter set to with a will to exploit the open spaces. The Roland Park Company had already proved that people wanted to get out of the city, and their developments, always very well done and of the highest standard, encouraged a multitude of more or less cheap imitators to ride on the wave of popular enthusiasm. The war boom came as a godsend to city property, bringing in a flood of new people to fill up the holes in the town, but as the employment slowed down, the temporary population gradually departed, leaving behind only the great mass of unskilled negro labor, always inert in the presence of low rents and casual employment.

The 1928 boom kept tax returns coming in, but the depression has intensified the results to be expected from our case history. Only the prevailing conservatism of the property owners in Baltimore has saved the city from a serious tax delinquency. However, the taxable basis is now shrinking so rapidly during the past two years as to cause the authorities serious concern over the credit position of a city which prides itself on its conservative and solvent financing.

There are practically no satellite towns around Baltimore. The population within the "metropolitan district" will only slightly exceed a million people. Within one hour by train from Washington, which attracts all the vacation and tourist trade; within two hours of Philadelphia, the wholesale and distribution centre for the area; and with Wilmington within an hour and a half by rail, Baltimore's tributary territory is definitely and finally limited.

Standing at the gateway to the South, Baltimore, as an industrial city, has attracted to it a tremendous colored population of 142,000—nearly a fifth of the city's inhabitants—and this group, largely newly recruited from the farm lands of Maryland, Virginia, and North Carolina, is very largely unskilled and inefficient, depending on boom conditions for anything like full-time employment. The wage and salary scale of the city is inevitably set from this base of surplus cheap labor. Living costs once founded on this have been steadily pushed up by the increasing nation-wide organization of producers, to a point that has made the margin between income and living costs very narrow.

The architectural population of Baltimore, including all hands, could never have exceeded 250 in the peak years. The 'phone book carries only 99 names today, of which 70 represent principals or firms in any sort of practice. This is a fairly true indication of the demand for architectural service. The largest office has practically never had more than twenty men employed since the great fire.

* * *

Competition from firms outside the city has always been steady but never severe. Most of the projects were not of a size to tempt out-of-town firms, and except for a few monumental buildings won in competition, or jobs where the owners were strongly connected with out-of-town firms, or where the project was in the control of a Federal Bureau, work has gone to local firms fairly constantly. The growth of control of industry by national firms and corporations has tended to reduce local control of industrial projects in the last few years, and has made that field harder to enter.

The dollar bulk of architectural work to date has been in the residential field, with, of late years, an unbalanced preponderance of houses from $15,000 to $75,000, due to the flight from city house to country and suburban living by the well-to-do. The Roland Park Company, with their remarkably well-executed series of suburban developments, has intensified this boom in home building by architects.

A great many of the younger men have set up and run offices almost exclusively on this work, and the sudden end of this activity has reduced many to practical unemployment.

Apartment houses have never been popular in Baltimore, and only in the last few years have a handful of truly modern buildings been built. Even at present, though less numerous than in most smaller cities, the average building is in very poor financial condition, as all the newer ones are burdened with promotion costs typical of the boom psychology.

Industrial plants have been built in a constant but small number each year. As elsewhere, many of them have been carried out by industrial engineering firms with specially organized sales forces.

Monumental, church, and other public buildings have been a steady source of employment for several of the offices here. The presence of the Johns Hopkins and the University of Maryland medical schools and hospitals has also been the cause of a large amount of steady work for architects. Office buildings have been only very occasional, since the great fire, when a very adequate supply of this space was built very rapidly.

The public schools of the city have been practically rebuilt within a ten-year period, as a result of a survey which proved that years of neglect and a great shift in population had made the existing buildings both unusable and disgraceful. The ultimate cost of this program, now practically complete as far as available funds go, has exceeded $15,000,000. This work was about as equitably distributed among the architects as could have been hoped for from any politically controlled public funds. It has been a major source of employment, but not at all a source of well-being to the architects. In a vast majority of the cases offices doing this work got no more than pay for their use of the office and drafting time, often actually losing a small amount on the work. They were ready to make some sacrifice to the public welfare but can no longer undertake to make cash presents to the city. The cause of this condition lies in the city charter, granted by the State legislature, which is not a bill of rights for the city but practically a specification for the management of municipal affairs. The charter definitely charges the city government to do all superintendence, and take all responsibility for contracts and construction. The architectural fees have been accordingly closely trimmed on this score, but each year a small addition of executive work, checking shop drawings, co-ordinating subcontractors' work, delays, changes and irresponsible vacillation by the school board, which has a very divided responsibility, has put a burden of expense on the architect now too great to be borne.

Large-scale public or semi-public housing for low rentals is actually becoming a field in which real demand justifies activity. In the owned-dwelling field, the new Housing Act, if it can be kept out of the hands of political and promotional interests and left in the control of intelligent and public-spirited men, should do much, through both alteration and new work, to supply bread and butter for the architects. In the rental field, after long study, all those interested are strongly of the opinion that only Federal projects can be hoped to start activity, or to succeed under present conditions.

* * *

Baltimore is a brick-built city in which almost all the "city houses" go back from fifty to a hundred years. Comparatively well built, these buildings usually appear sound and habitable. But, built for a type of life that has disappeared forever, for large families, plenty of cheap colored servants or, in the older cases, slaves, and cheap fuel, with only light horse-drawn traffic in the streets, they are now as obsolete as sedan chairs. No one who can possibly afford anything more comfortable will consider using them. Now largely owned by shoe-string operators, they are euphemistically called apartment-houses, but are practically the most objectionable type of cheap rooming-houses, sometimes white, more often negro. There are hundreds of acres of them, and they are nearly half empty in some sections. There are not even enough slum dwellers to fill our potential slums. The occupied rooms are usually overcrowded, while elsewhere space, or rather kennelling, is abundant. It is needless to say to what extent the taxpayer is the loser by this condition.

While any projects undertaken by the Government would not take up much slack, either in this condition, or in the employment in the building trades and architecture, a sound demonstration project might well turn the eyes of the citizens to the potential salvage of their wastes of land and taxes.

* * *

Never geared up to boom conditions, Baltimore architects have had to take up much less slack than many of their contemporaries elsewhere, and have therefore been less exposed to exploitation up to this time. Now that surpluses or savings, and in fact all resources, are almost exhausted, the struggle between ethics and necessity has reached the acute stage. They will either have to hang together better than they have ever done in the past or "hang separately," strangled by "unfair competition," shopping clients, and bootlegging corporations.

Baltimore architects have never been extremely active in public affairs, and have always tended to control the sources of work, rather than becoming the proponents and instigators of building projects. They have, in other words, clung to the old-fashioned family-doctor type of practice, and until industry and finance became national instead of local, this proved very pleasant and successful. Now there is some heartburning in the ranks over the walk-out of supposedly safe prospects.

There has been a good deal of work done by competent and ethical firms for speculative builders. The Roland Park Company demanded good architecture in all its developments. It was obliged to sell a good part of its land to builders who built for sale. A certain group of builders worked up a considerable trade, advertising largely by means of their well-designed products, and carried their architects deeper and deeper into a practice which was dangerous enough, but which the crash of 1929 stopped short before the public could realize that an architect in the builder's employ was a man in chains and not certainly to be relied on. Since then many things have come to the owner's attention. Architects as a class have not been benefited in the eyes of the public by the many doubts that this type of work has aroused in the minds of the intelligent.

As far as desire goes the Baltimore householder is still of a mind to fly the city house for the suburbs, but lately lack of funds has made this impossible, and there would be a real demand for dwellings in the city if modernly planned and built property, with plenty of open ground and with air and light, were available. Car fares are, at the minimum, ten cents, and to many of the suburbs twenty cents or more, and the service is slow and uncomfortable. There is a four-cent gasoline tax in the State. The city streets are narrow and inadequate, and parking is increasingly expensive either in fines or in rented space. Commuting is not cheap any longer except for the long pulls on the still despised railroads.

Comparatively few of those who live in Baltimore want any real change in the known ways of doing things or making a living, and the real estate men are no exception to this. They, as a group and with individual exceptions, refuse to admit that any change in fundamental conditions has upset the apple cart once and for all, and are still trying to peddle obsolete properties and obsolete ideas to an eager world. They even grumble about their obvious lack of success in this strange occupation. As to collaboration with the architect, they still look on him with considerable justification as a fruitful source of "easy money" in the form of unpaid-for service.

* * *

Like many of the cities reporting, Baltimore's financial interests are not even in a position to discuss building projects as abstractions which are interesting though academic. They are much too busy patching or concealing the holes in their credit structure.

The architect has had fifteen good fat years in which to get his public to accept him as a man with nothing to sell but valuable and necessary advice and service. So far have the rank and file been diverted from this simple aim, so little have they lived by or compelled their contemporaries to live by a "Hippocratic oath" of their own, that they are very largely reaping the whirlwind sown before their eyes and in their very front yards by the many who were only interested in cashing in on the wind.

> There was a man he digged a pit,
> He digged it for his brother,
> And straight away he did fall in
> The pit he digged for t'other.

Here endeth our first attempt to produce a section of the magazine through the medium of a Guest Editor. We hope to do it again in an early issue. Meanwhile, the Editor will welcome comment, favorable or unfavorable, upon the scheme itself, or upon any of the subjects discussed

Raymond Mathewson Hood, 1881-1934

AN APPRECIATION BY ELY JACQUES KAHN

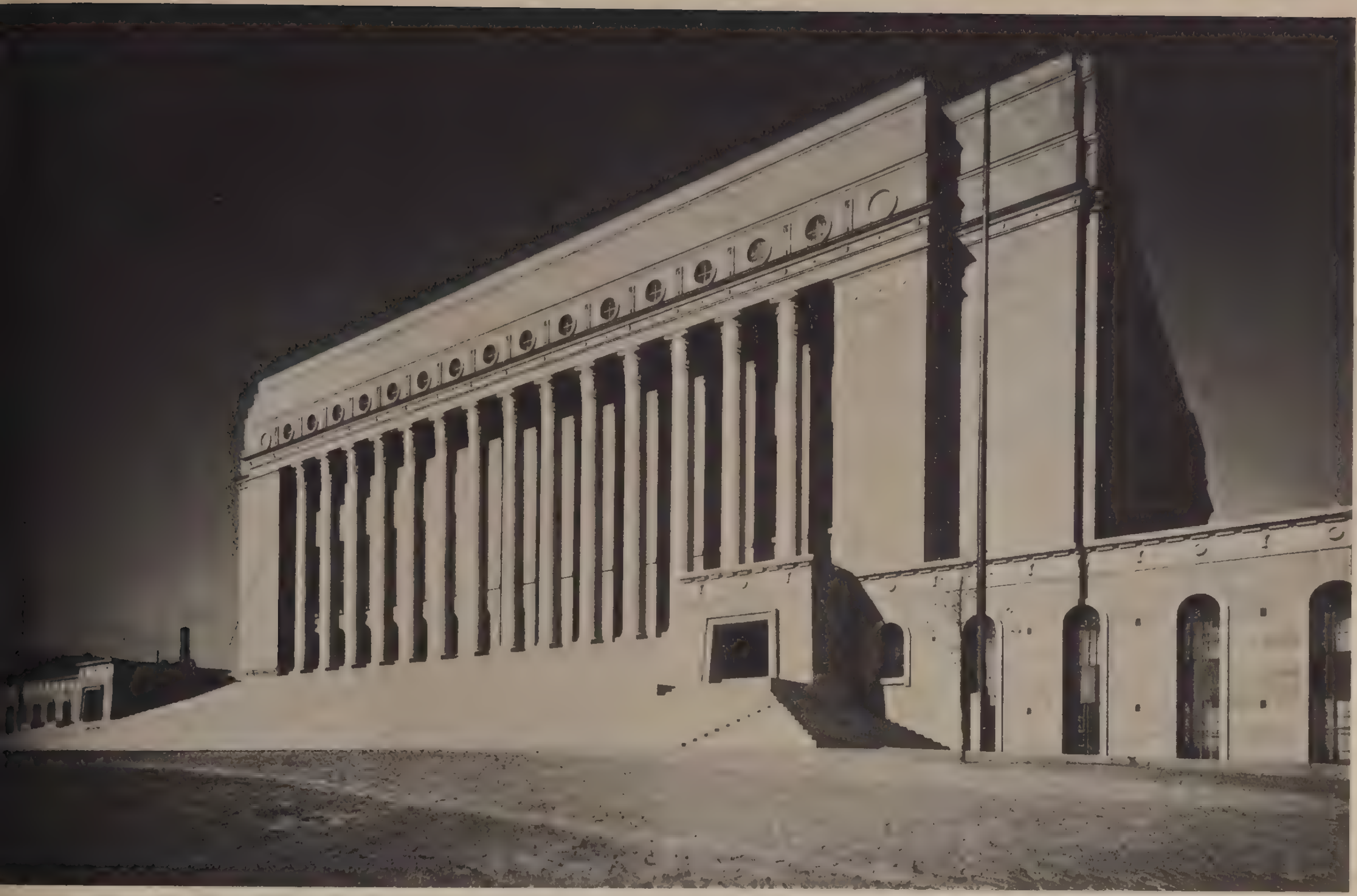
IT is no simple task to write about Raymond Hood. It is difficult to find adequate words to describe now one who was so supremely alive; one can almost sense his quizzical smile at the prospect of a conventional obituary—particularly for one who was so unconventional.

If Hood had not left an indelible mark on American architecture, he would have stamped his personality just as vigorously on the memory of the friends who loved him as a comrade and worked with him in the varied activities in which he led. From student days through the years of his active practice, Hood could always be counted upon to be different. One might quarrel with him on minor details, but he was just as likely as not to agree on the criticism, provided that the observer respected the broad scheme that Hood himself found interesting. He was a modest, forceful, positive dreamer who brushed aside trifles and searched for the solution to the problem in hand—the more difficult the better. Years ago, when competitions were more frequently held, Hood's entry would have to be taken seriously, for his scheme would win, or be up with the leaders. When the tall buildings began to be erected, Hood once again blazed a way that many followed. Looking over the drawings of the Chicago Tribune Building competition, it is easy to see why Hood's scheme won out. There was clarity and logic in plan and mass. The fact that his detail was Gothic amused him some years later, for, as he put it quite tersely himself, the building was erected when embroidery was in vogue, and he was more concerned with the actual structure than its shell.

Quite promptly Hood created another sensation with his Radiator Building—the first tall structure to use color boldly. The Daily News and the McGraw-Hill buildings were other pioneering steps that showed Hood's progress and courage. Hood was no camp follower; no sweet adapter. When a new job arrived and Hood was involved, it was certain that banalities would not appear. The Chicago Fair and the Rockefeller work show the marks of his genius. He would be patient and sympathetic with collaborators, but in some fashion or other his brilliancy always shone through because the strength of his logic could not be denied.

Hood was, of course, an iconoclast, difficult to catalogue and impossible to appraise in view of past performances. One knew that his next job would be interesting, provocative, stimulating, representing a form of beauty that could not be judged by conventional standards. Above all, he was alive, a thinking, quick-witted, intelligent artist.

And now he is gone. He will be sorely missed by his profession, for men of his high character and freedom are rare. Those who worked with him in more recent years, who sat with him as a delightful host, or knew him as a companion, realize full well what his loss entails. It would be a poor record of his memory to recite his works or chatter about his accomplishments as an architect. He had produced in himself a fine design of a man, gracious, loving, considerate; a man whose quiet strength might be forgotten when one considered the perfect friend.



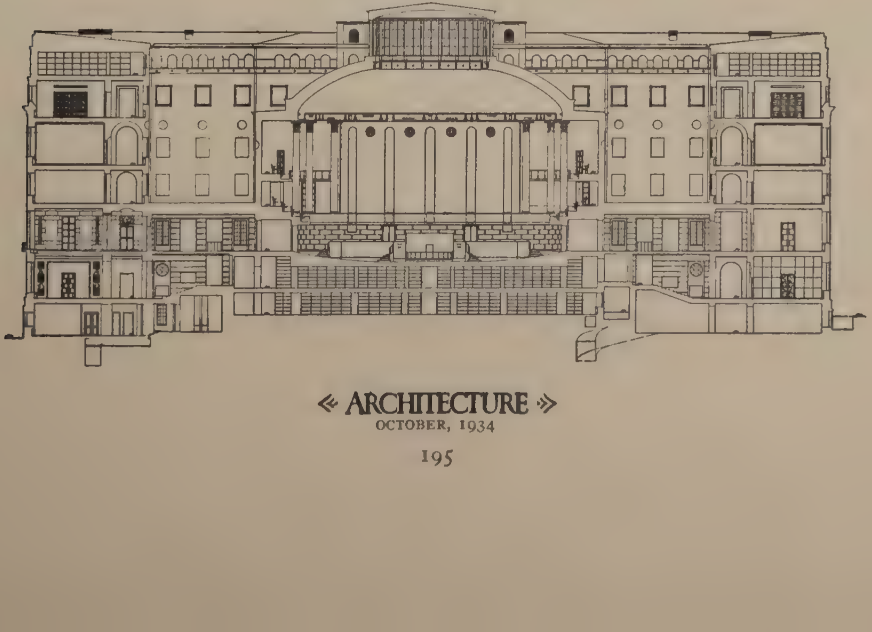
Photographs by H. Iffland

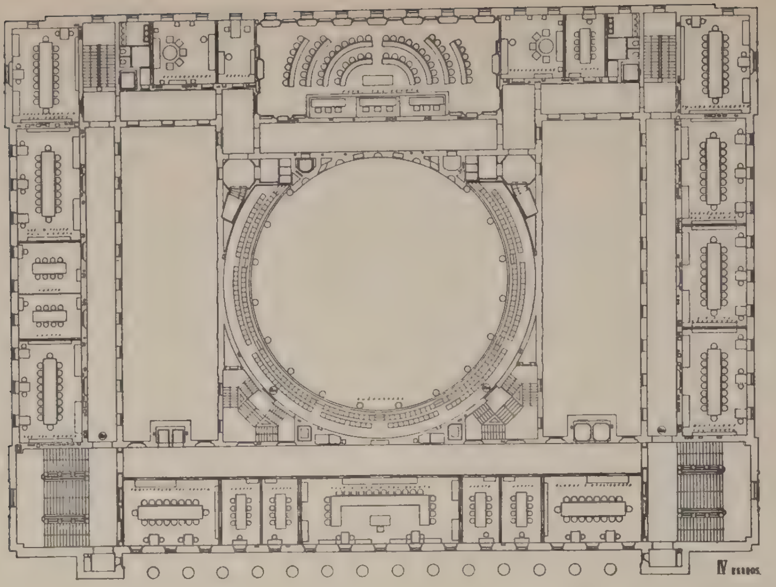
Finland's New House of Parliament, Helsingfors

J. S. SIREN, ARCHITECT

Upon the exterior the architect has faced the walls with an unpolished pinkish granite, mottled with gray and yellow markings. One interesting detail of the construction lies in the fact that the facing was erected first in order that it might serve as the outer form for the reinforced concrete wall behind it

Here is a longitudinal section of the building showing the relationship of the Council Chamber to the whole

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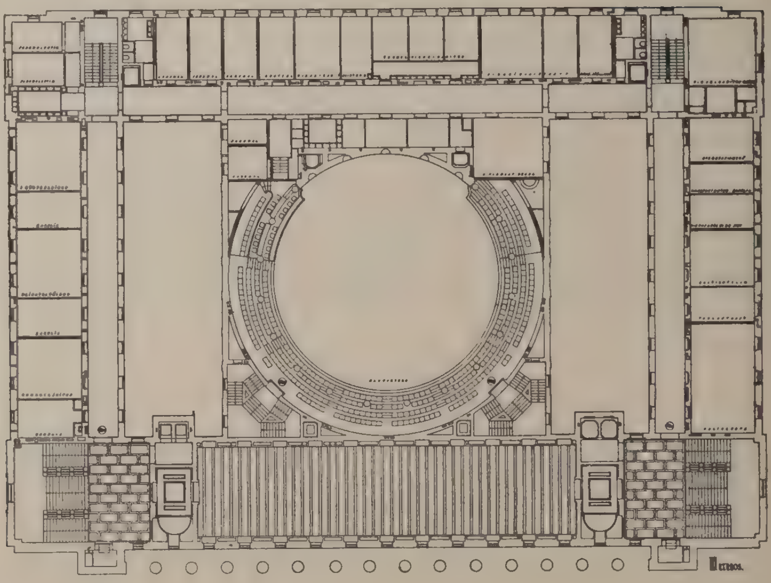
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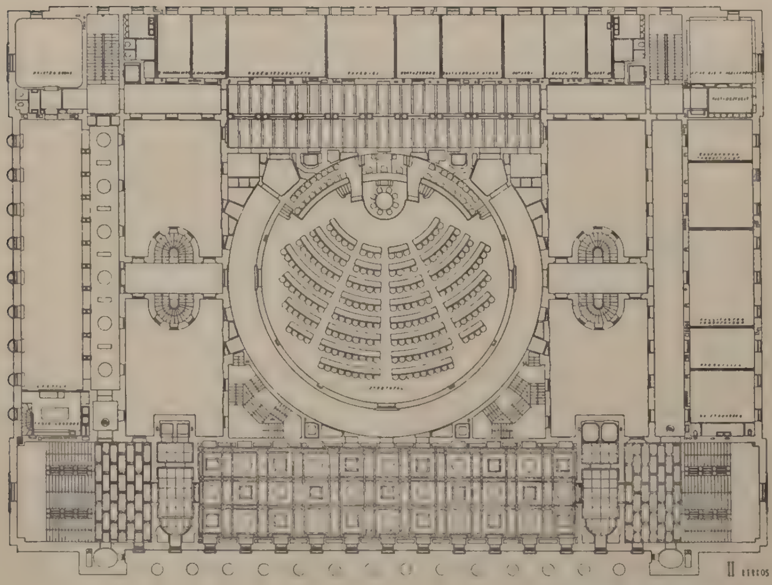
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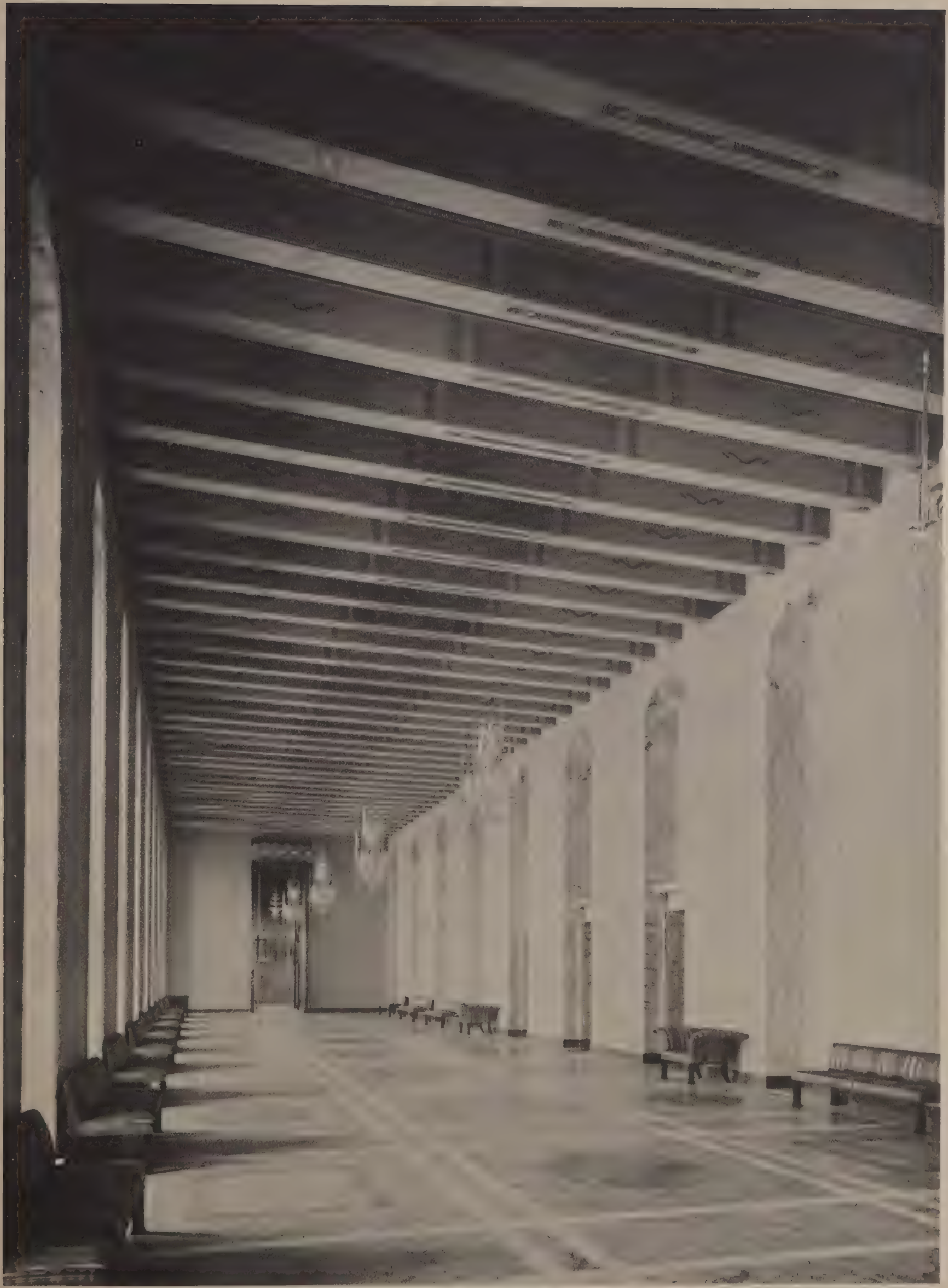
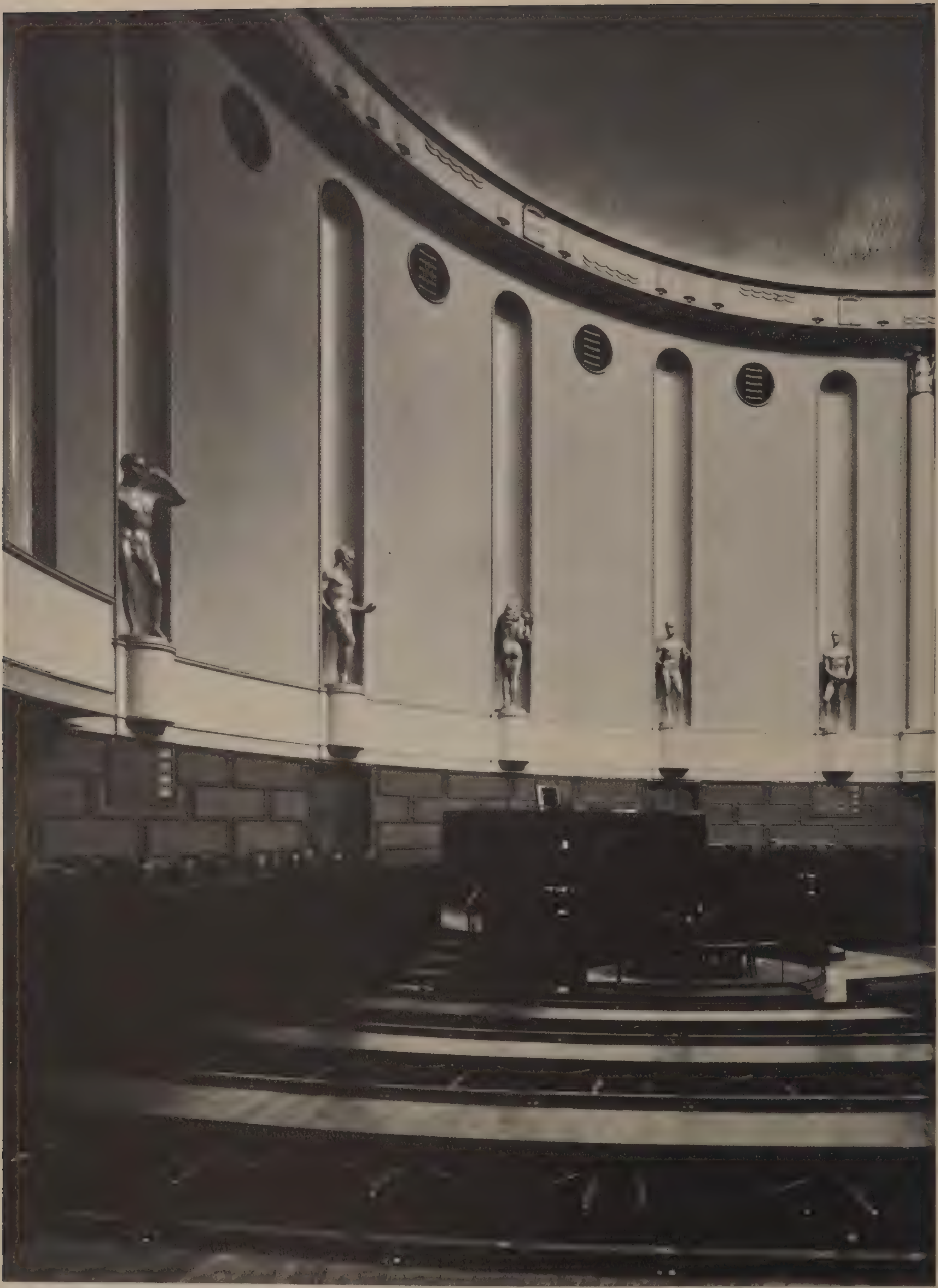
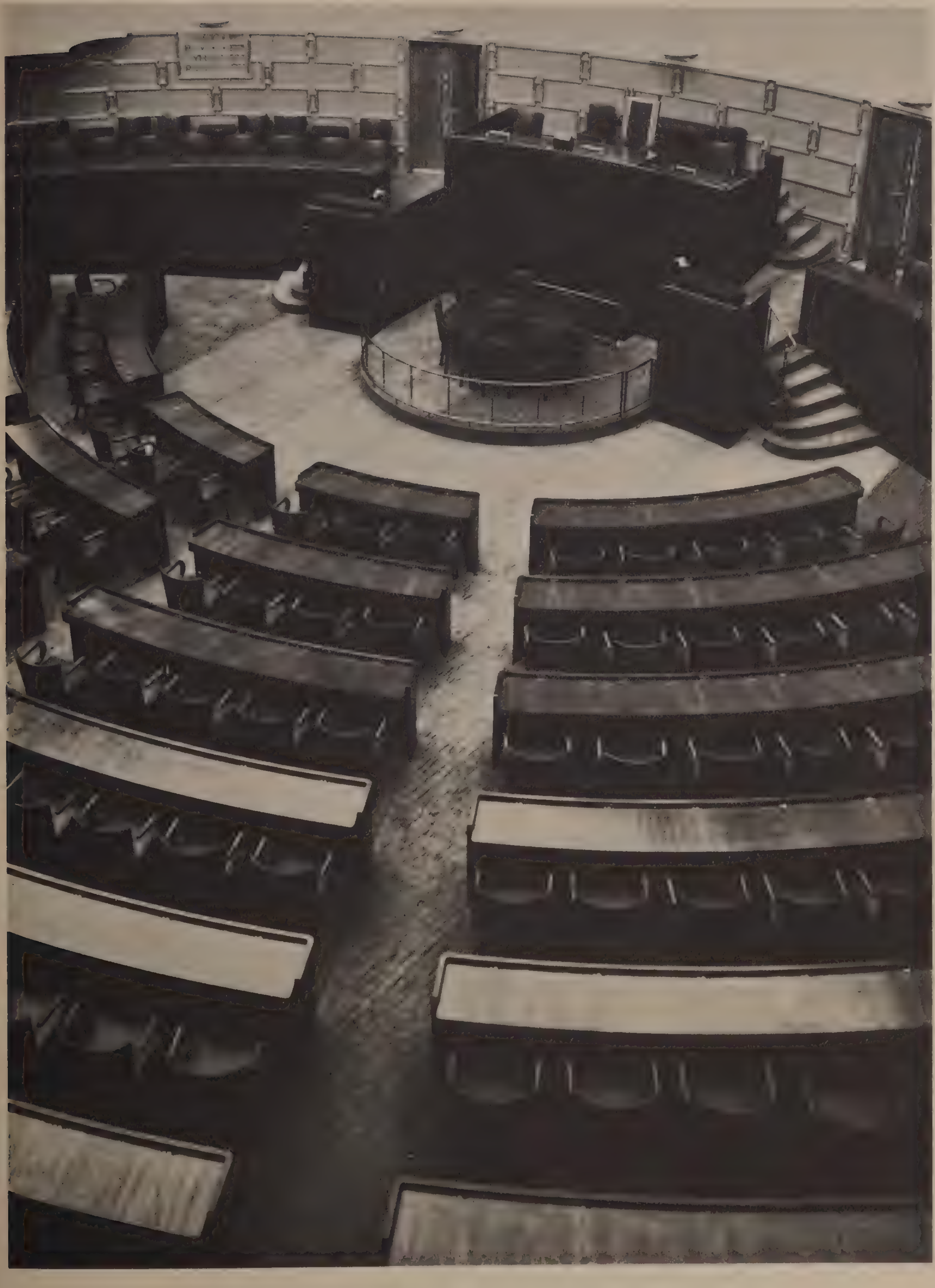


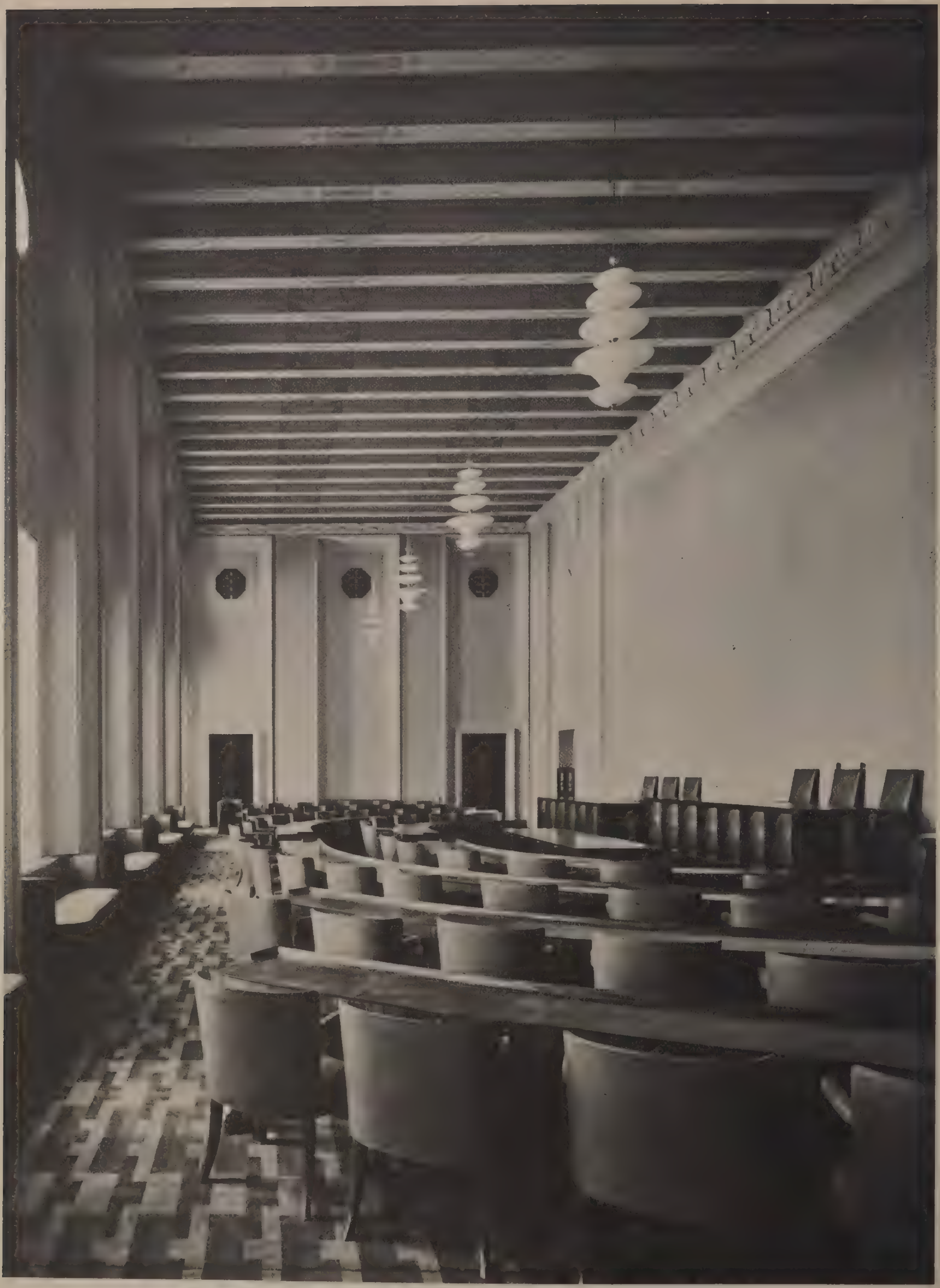
In the Grand Hall, which extends along the main front of the building on the same floor as the Council Chamber. The floor is of marble, and marble has also been used for the linings to the wall recesses. The lighting fixtures are silver-plated on copper, with crystal enrichments. A hand-woven fabric covers the furniture



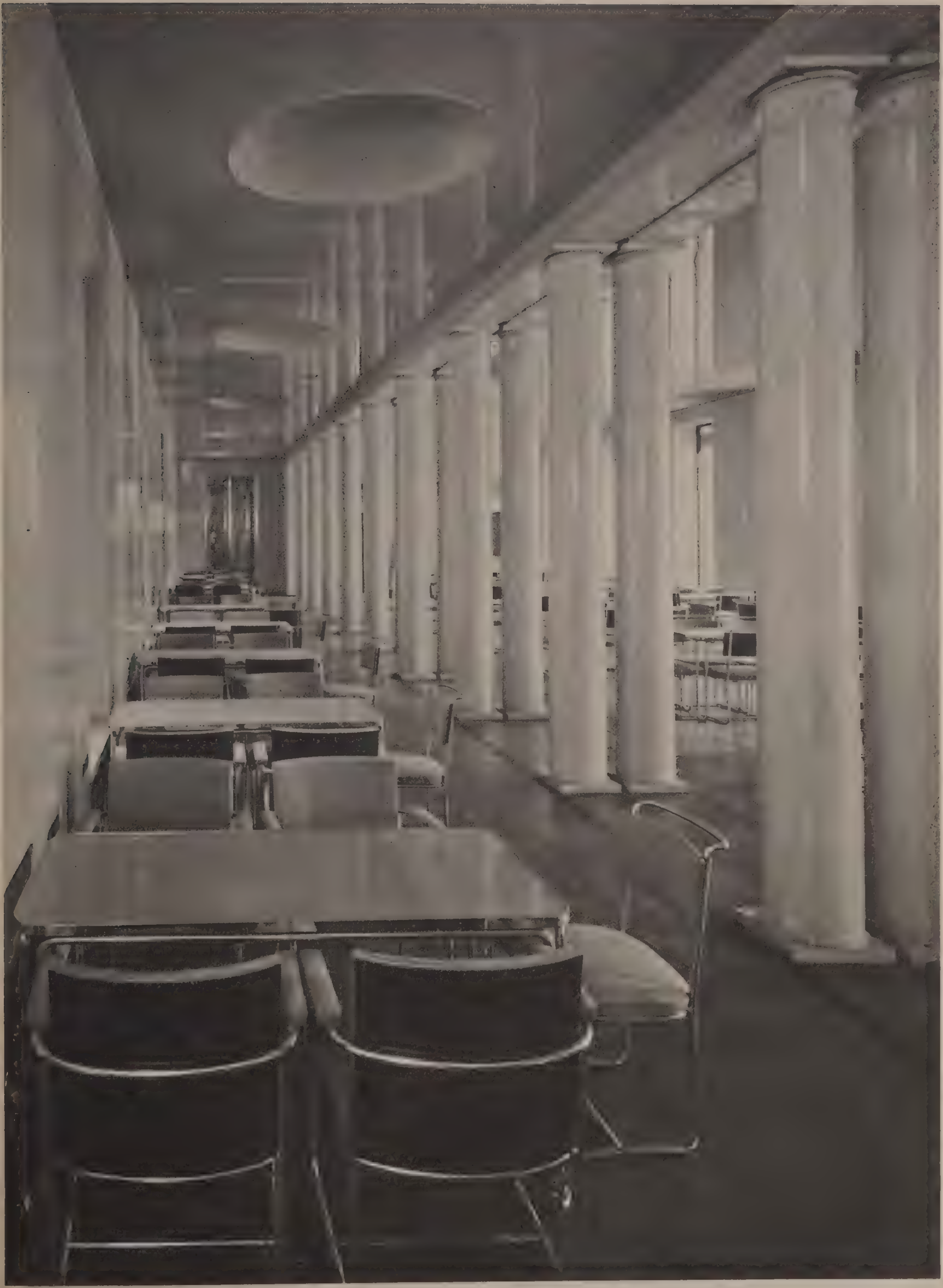
A detail in the Council Chamber. The color scheme has been carefully studied in its relationship between exterior and interior. Here the walls are covered with an especially woven grayish-green fabric which, on the lower part, is divided into panels with strips of birch



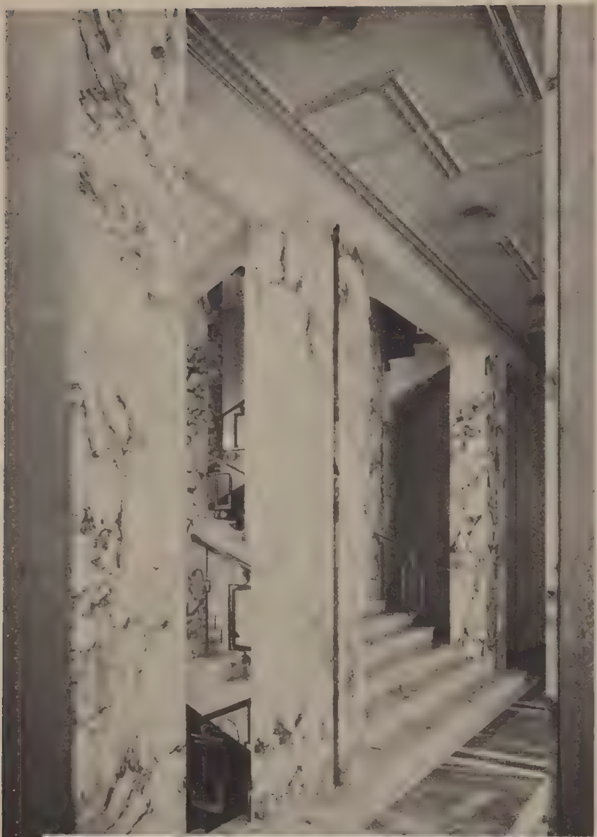
On the floor of the Council Chamber there is a brown Wilton carpet.
The architect designed the furniture, which is of stained birch

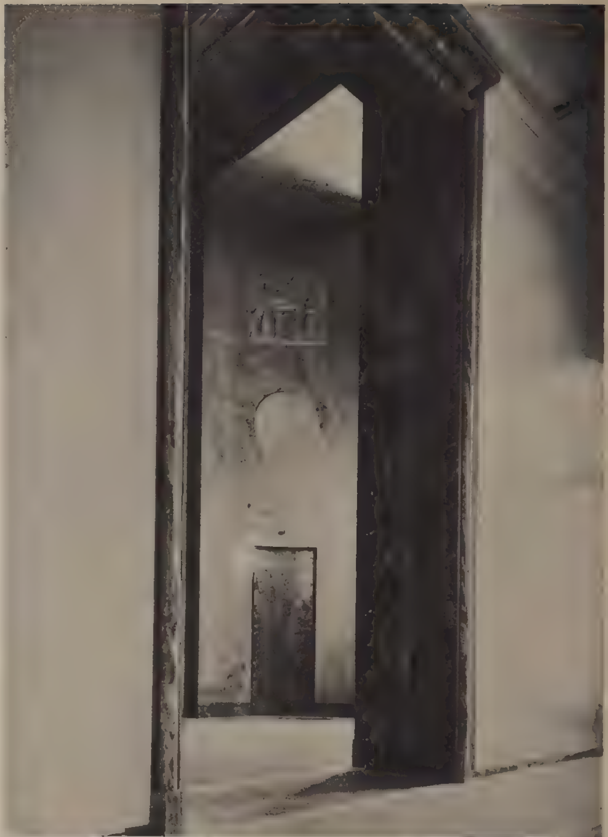


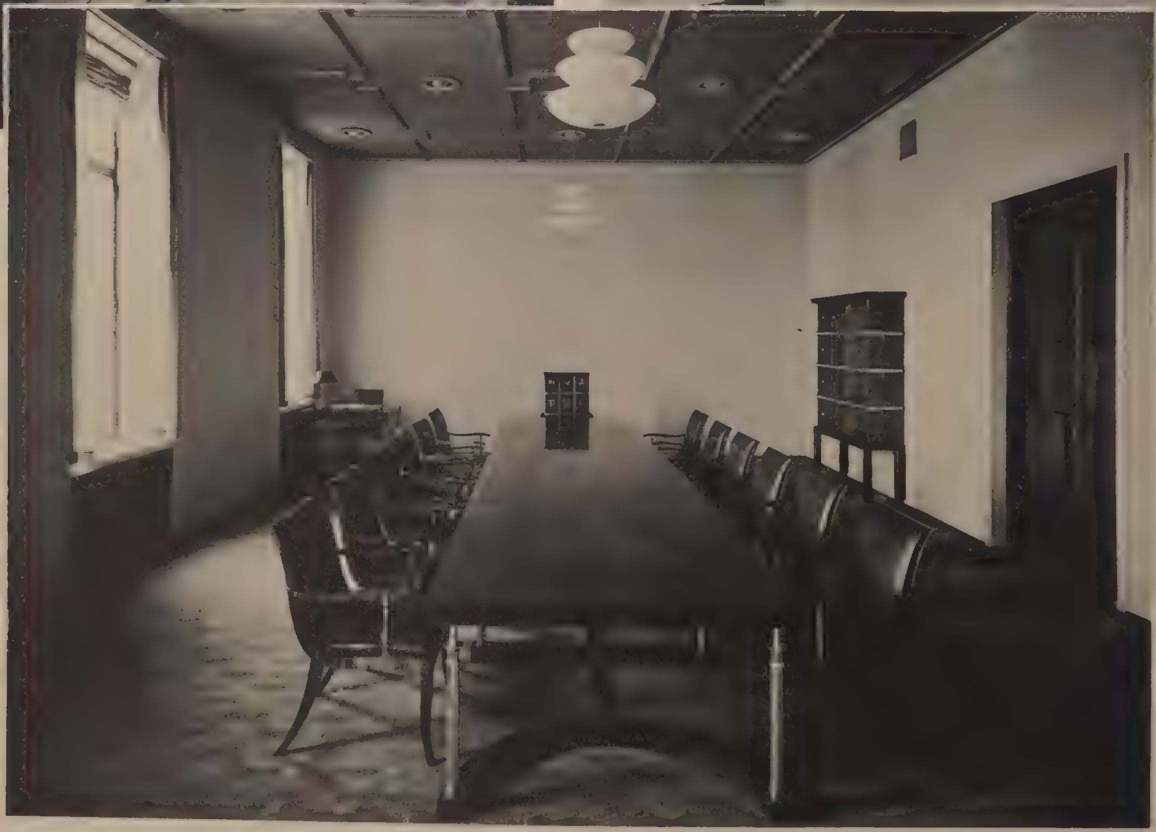
One of the committee rooms. Here the walls have been covered with a fabric, the floor carpeted, the furniture upholstered in a bluish green leather



In the dining-room the furniture is of stainless steel and glass. The chair seats are covered with fabric, the backs being of painted wood. This furniture was designed by V. West







Above at left, a detail of the grand stairway in black-and-white marble with bronze railing. Above at right, an interior doorway lined with Scagliola marble with terra-cotta figures inset in the marble wall beyond. Below, the Session Room. Here too the walls are covered with fabric, the furniture designed by A. Brummer

FRANK HARTLEY ANDERSON

Today's Craftsmanship in Combining Metals

FRANK HARTLEY ANDERSON

By Eugene Clute

INLAYING, the combination of different metals in repoussé work, and the use of vitreous enamels—all methods that were until quite recently confined to small works in metal such as jewelry—have entered the field of architectural metal work. Here they are now employed at large scale, sometimes in works of colossal size. These transplanted techniques have developed to meet the new requirements and have been enriched by new materials and new methods of fabrication made available by scientific and industrial advancement.

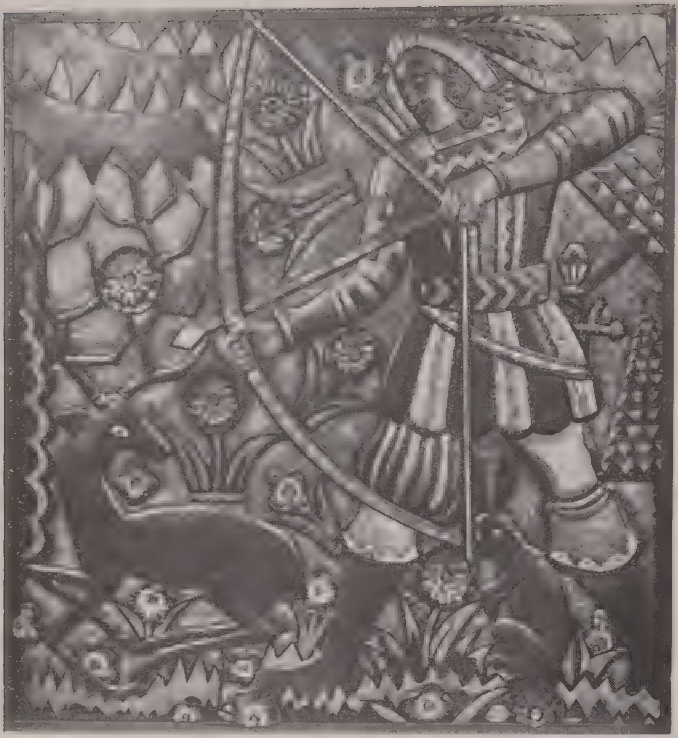
As a result, architects now have at their command a wealth of new techniques in metal craftsmanship. So far, they have been employed only in pioneer work and they are still unusual. But their artistic possibilities have been demonstrated, as well as their practicability. They open a very interesting and fruitful field for further exploration.

Perhaps the first notable example of this kind of metal work was the series of large decorative wall panels that were designed by Winold Reiss for the Hotel Alamac, New York City, and installed in the grill room when that hotel was built, ten years or more ago. They were executed in a combination of metals worked in repoussé, including wrought iron, copper, brass, steel and aluminum. The craftsmanship was executed by Julius Ormos and Charles Bardosy. The work represented scenes of the chase, rendered with an admirable sense of decorative values and a feeling for the technique employed.

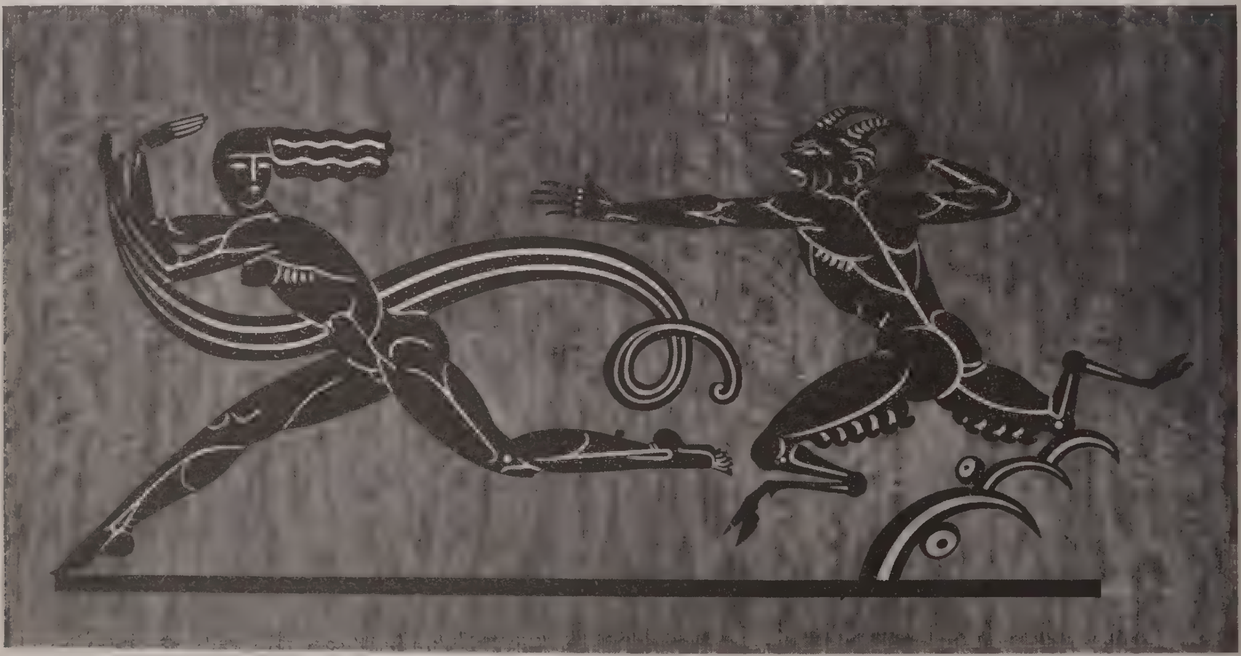
Similar in technique, but with very important differences, are the three placques of repoussé work in combined metals on the exterior of the Music Hall, and the large ornament on the Center Theater in Rockefeller Center, which were designed by Hildreth Meière and executed by Oscar B. Bach. In these instances the problem of preventing electrolysis had to be met, because these works, being out-of-doors, are exposed to the action of dampness and of the impurities in city air. This did not need to be considered in the case of the Alamac panels, which were protected indoors. To prevent destructive electrolytic action between metals that are of markedly different potential, such metals have been coated with a transparent insulating substance at all points where they are joined together. Also, the great size of these works and the need for sufficiently rugged construction in heavy metal to withstand the violence of wind storms, called for differences in technique. The larger sections were formed by being beaten with a hammer over irons, before they were placed upon the pitch bed to receive the lines of the detail. Then, too, the placques have, in addition to the polychromy of different metals, the added colors of vitreous enamels in red, blue and green upon the copper repoussé parts. The fact that these surfaces are not flat, but modelled in relief, tended to make the enamel run off the high parts and to collect in the low parts while in a state of fusion during the firing; also, the contraction of the enamel in cooling tended to warp such large pieces. These difficulties were surmounted by methods in which important parts were played by the application of the enamel in three coats, each followed by firing, and the use of a coat of enamel upon the back as well as the front of pieces in which it was necessary to offset a tendency to warping. But this was by no means as simple as it sounds, for it called for a high degree of technical knowledge and of skill in craftsmanship, as well as ingenuity.

Though these metal decorations at Rockefeller Center have been exposed for two years, apparently no corrosion or other action has taken place affecting the metals. They have acquired an even, thin coating of dirt, a mixture of substances from the smoke of the city and of dust, no doubt, which tones down the brilliant coloring somewhat and harmonizes it with the gradually darkening limestone walls against which these decorations are seen.

Repoussé work and inlaying are found in what are, probably, unique examples of the combination of these methods—the silhouettes over the doors in the grand foyer of the Center Theater, Rockefeller Center. These silhouettes are cut from steel, which is given a lasting satiny black finish by chemicals and heat treatment. They are inlaid in the wall surface, which is of steel with a facing of wood veneer cemented to it. Detail is given to these silhouettes, very effectively, by silvery lines produced by piercing the



A wall panel designed by Winold Reiss for the Hotel Alamac, New York City, in repoussé, using wrought iron, copper, brass, steel, and aluminum. Craftsmanship by Julius Ormos and Charles Bardosy

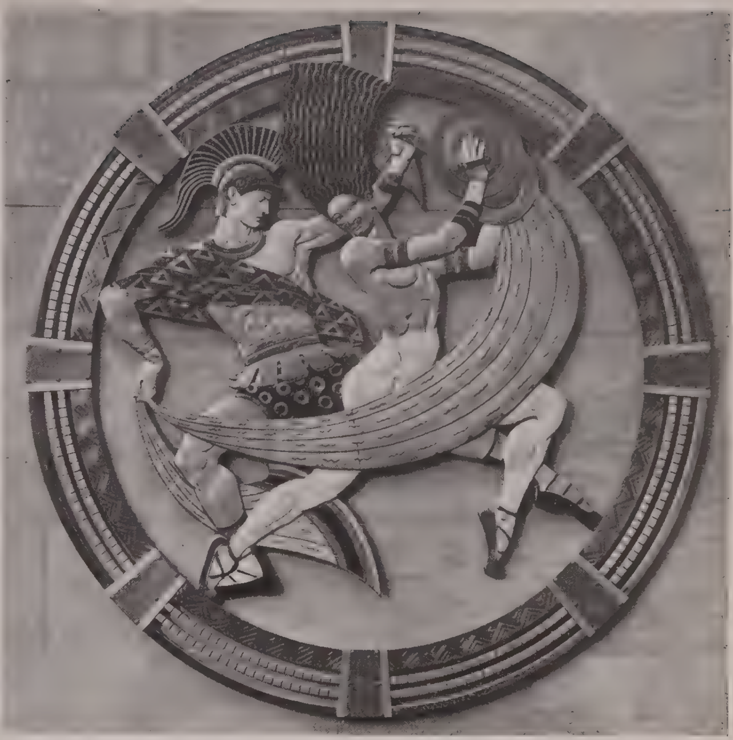


In the Center Theater, Rockefeller Center. Designed by René Chambellan and Oronzio Maldarelli, in steel, aluminum, and wood veneer. Craftsmanship by Oscar B. Bach

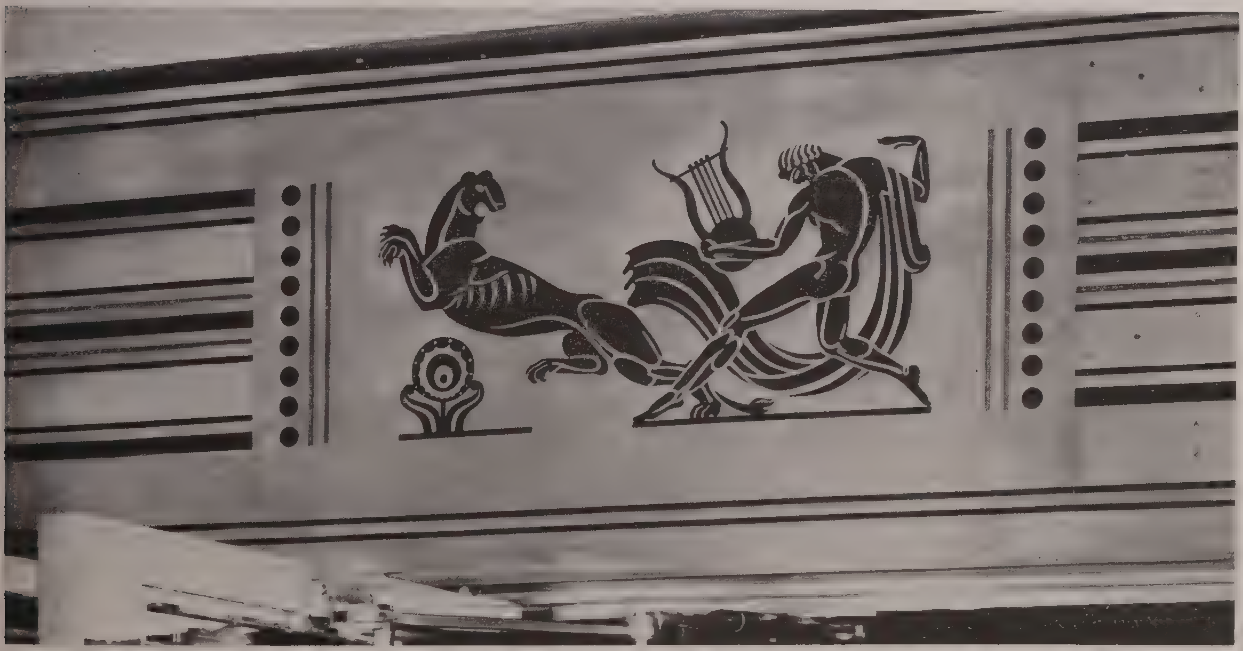
silhouette plate and affixing to the back of it a plate of aluminum upon which raised lines to match these piercings were produced in repoussé. The aluminum was driven into the piercings, which were rounded at the back. In this way the steel formed a matrix in which the aluminum was formed. These lines of aluminum fill the piercings, coming flush with the face of the steel. The designs were drawn, in collaboration, by the well-known sculptors René Chambellan and Oronzio Maldarelli. The architects were Reinhard & Hofmeister; Corbett, Harrison & MacMurray; and Hood & Fouilhoux.

Silhouettes that are quite different in technique and probably unique also, are found in the outer lobby of the Center Theater. They also were designed by René Chambellan and Oronzio Maldarelli, and executed by Oscar B. Bach. They are of black formica, the basis of which is bakelite, inlaid in bronze of a golden color, as points of interest in the frieze extending all around the room and marked by stripes of this material, in Chinese vermilion and in black near the ceiling. Just above the dado, which is of cast bronze with shallow vertical fluting, an ingenious method has been employed in this inlay. The bronze plate was pierced with the design and the piercing was bevelled by filing the openings slightly wider at the back of the plate than at the front. The silhouettes were cut out of the black material and bevelled in the reverse direction to match, that is slightly smaller at the face side. Where lines or other details in bronze were wanted in areas of black, piercings were made in the black material, bevelled wider at the back, and the bronze inserts were bevelled in reverse. All the parts were then assembled from the back, the work lying face downward upon the workbench, and a bronze back plate covering the whole design was attached to the back with screws. As a result, the silhouettes are held in the bronze plates by the bevelled edges and they in turn hold the bronze details in the same way. Because of the bevelling, none of the parts can move forward and, because of the cover plate, none can move backwards. The red and black lines and the dots were similarly inlaid.

Inlay may be given detail by modelling in relief, as in the case of the ornamentation around the entrance to the Central Hanover Bank and Trust Company's Forty-third Street Branch, New York City, which seems to be an only example also. This ornamental design is cast in nickel-chrome steel and inlaid in the polished black Shastone granite facing of the exterior. It was designed by York & Sawyer, architects, and executed by the General Bronze Corporation. The recess to receive the metal was carved in the granite by means of a sand-blast applied through the openings in a stencil. Surprisingly, the blast which tore out the hard granite did not damage the stencil, which was of paper. The reason for this was that the stencil was coated with varnish. Sand, adhering to this, formed a coating which resisted the sand driven by the air blast. The metal castings were then cemented in place.



Combined metals in repoussé work on the exterior wall of the Music Hall, Rockefeller Center. Designed by Hildreth Meière, and executed by Oscar B. Bach



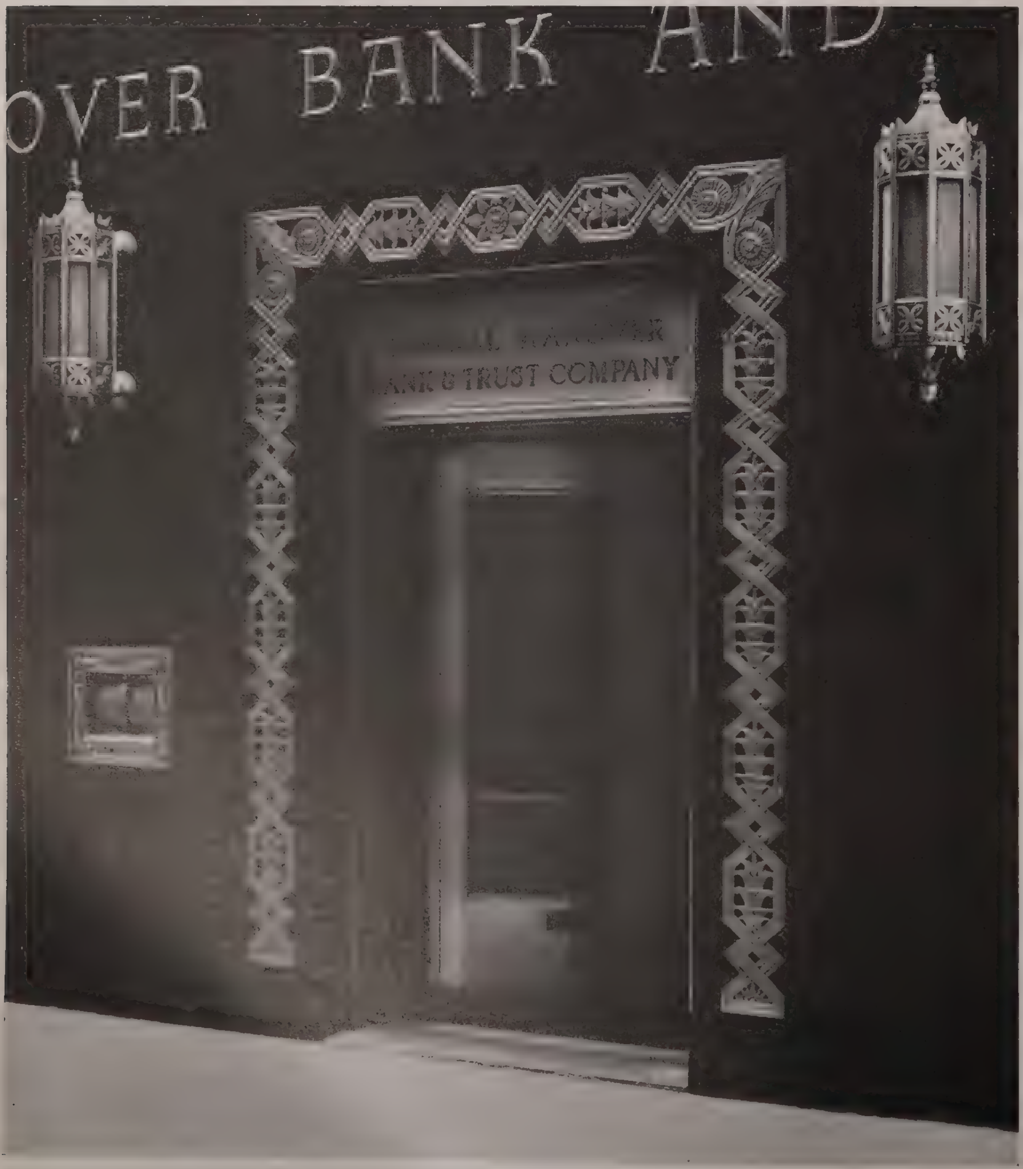
"Orpheus"—black formica inlaid in golden bronze with stripes of vermilion and black formica. Center Theater, Rockefeller Center. Designed by René Chambellan and Oronzio Maldarelli. Executed by Bach

The largest and finest example of metal work inlaid in marble is, undoubtedly, the great wall panel which is the principal decorative feature in the grand foyer of the Empire State Building, New York City, by Shreve, Lamb & Harmon, architects. The craftsmanship is by Oscar B. Bach. This panel shows a representation of the building itself in cast duralumin, from the top of which spread light rays done in the same material wrought and inlaid with golden bronze. The vertical lines of windows are in a black patine. There are outlines of duralumin inlaid in the marble to represent boundaries in the map of New York and portions of adjoining states, which form the background of the design.

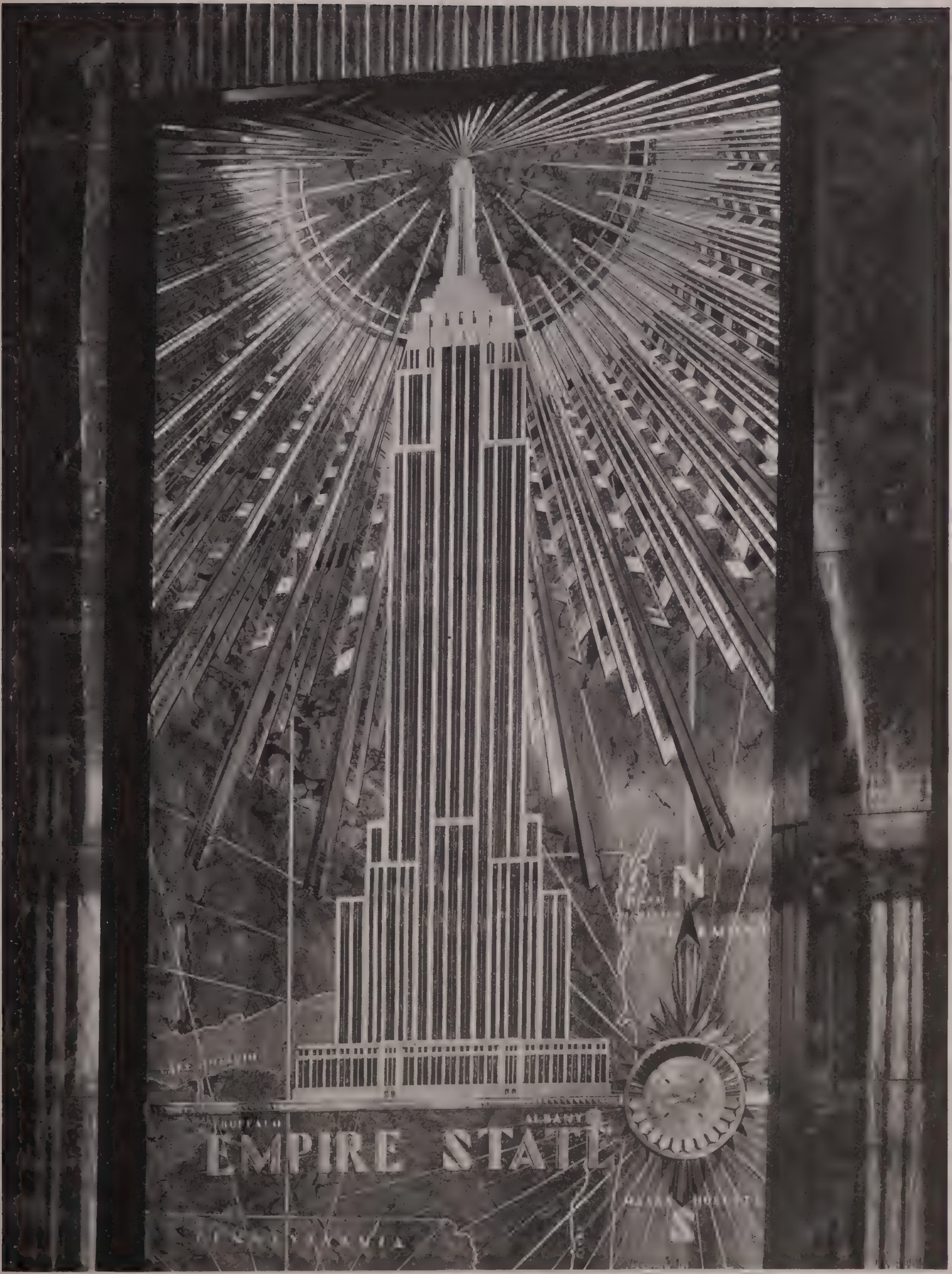
The bronze is inserted in recesses formed in the duralumin, but not undercut. To secure the bronze inlay, it was spread with a chisel by working from the back through small drill holes in the duralumin. This caused the spreading bronze to force its way into the duralumin at the sides, anchoring the inlay firmly. Though this work is indoors, the precaution was taken of applying an insulating coating to the metals before they were combined. The work has been in place four years and is in perfect condition.

Engraving and lamination are the methods of craftsmanship employed in the unusual and very interesting hinges of the doors on the north side of the Church of the Heavenly Rest, New York City. The design, by Mayers, Murray & Philip, architects of the church, represents events in the history of New York, from the purchase of the island of Manhattan from the Indians. The craftsmanship is by Ostrander & Eshleman. These hinges are made from mild steel, pierced and hand-engraved with incised lines, and they have cut-out plates of steel applied in the parts where a need for relief was felt. The lamination is, however, secondary to the engraving, of which this is an unusually rich example. To protect the work from the action of the weather, these hinges were cadmium-plated, and to give the desired tones and to bring out the design, a black patine was applied in the engraved lines and other low portions and rubbed off of the prominences, producing a half-polished finish. The way in which engraving and lamination have been employed together is shown clearly in the photograph of these hinges. It may be noted that from this partial use of lamination the architects proceeded to its employment as the principal method in some very fine hinges which they designed somewhat later for a church at Winston-Salem, N. C. These laminated hinges were shown and described in an article in the May, 1933, ARCHITECTURE.

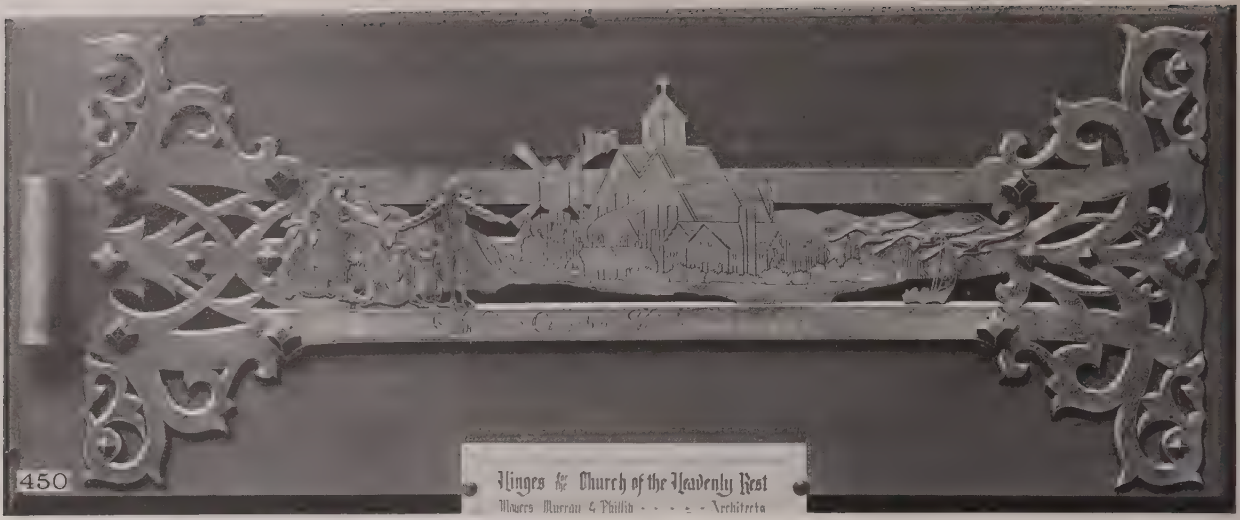
A masterpiece of technique in metal craftsmanship is the door designed and executed by Oscar B. Bach for Michael Paterno, the builder. Following mediæval and Renaissance traditions, it represents



Nickel-chrome steel inlaid in polished black granite. Entrance to Central Hanover Bank and Trust Company's branch, 43d Street, New York City. York & Sawyer, architects. Craftsmanship by General Bronze Corporation



Wall panel in the lobby of the Empire State Building, New York City. Shreve, Lamb & Harmon, architects. The conventionalized representation of the building is in bright and black duralumin inlaid in marble that is mottled in warm tones of gray. Inlaid in the duralumin are inserts of golden bronze. Executed by Oscar B. Bach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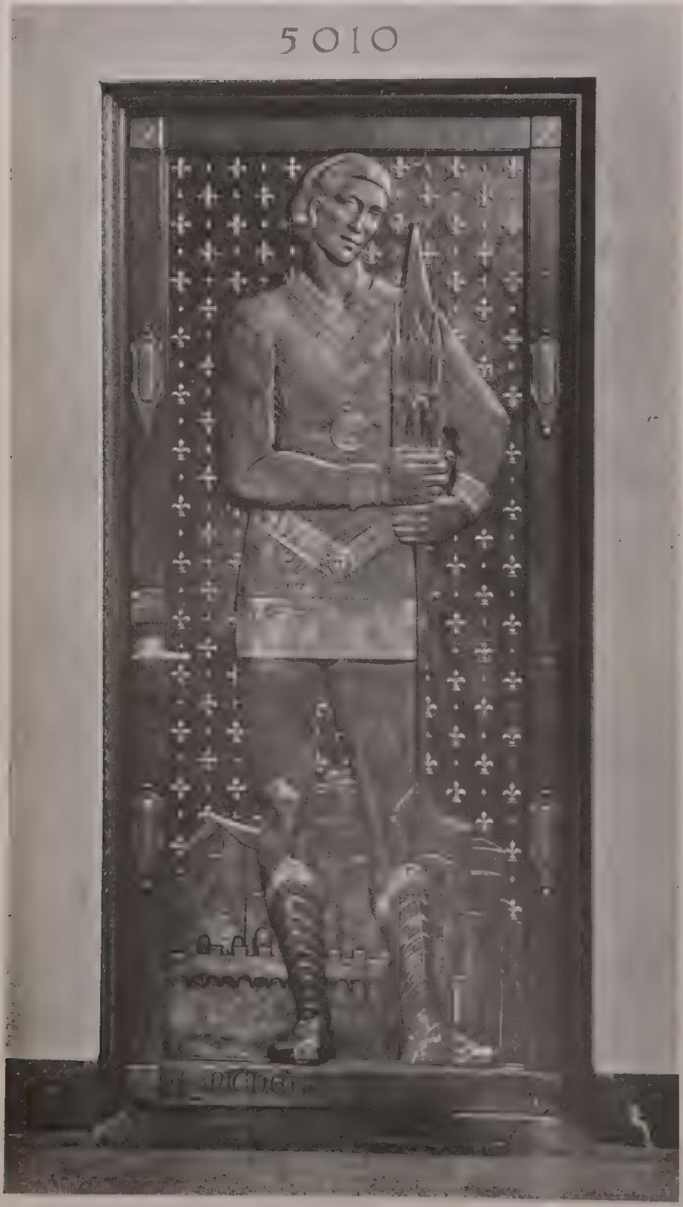
Hinges for the Church of the Heavenly Rest
Mayers Murray & Phillip - - - - Architects

One of a set of hinges for the Church of the Heavenly Rest, New York City. Mayers, Murray & Phillip, architects. Of mild steel, pierced and engraved, with applied bands of the same. Craftsmanship by Bach

Door to the apartment of Michael Paterno, New York City. Designed and executed by Oscar B. Bach. Bronze repoussé, hand-engraved and enriched with inlays of silver and gold



a standing figure of a master builder of the days when the arts of Italy were at their height. In his hands he holds a model of a Gothic church tower, and a pair of dividers hangs at his side. At the bottom, in the background, are representations of famous monuments of Florentine architecture. This work is in bronze repoussé, hand-engraved and enriched with inlays of silver and gold.

The background, of rich, varied dark brown bronze, is inlaid with fleur-de-lys motifs of silver repoussé. These motifs are inserted in recesses cut in the bronze and undercut. The inlays were spread with a punch to engage the undercut edges of the bronze. The principle is the same as that of the damascening with which the Saracens inlaid their fine sword blades with designs in gold—the art of Damascus which Europeans learned from the craftsmen of the East. The buildings are in repoussé bronze in tones of brown lighter than those of the background.

There is, it seems to me, something much more important than a mere desire for novelty back of this recent development of unusual techniques in metal craftsmanship. It has come in response to a demand arising from changes in our architecture and in our artistic ideals. The severely plain wall surfaces of our buildings, both exterior and interior, with ornamentation only at focal points, call for a sort of enrichment that is highly effective without dependence upon the shades and shadows of high-relief carving. In very many cases this new kind of metal work, which makes use of the silhouette, of boldly modelled low relief, that contrasts in material with the wall, and that is richly colorful and interesting in technique, is found to meet best the requirements.

The Reflecting Pool

Edwin Bateman Morris

A WHILE ago, the venerable French cruiser *Jeanne d'Arc*—Americanized and Rockefellerized on these shores to *John D. Ark*—dropped anchor at Annapolis and turned loose a lot of French midshipmen to attend a Saturday night hop at the Naval Academy.

It so happened on this occasion that an American girl, dancing with one of them, found herself embarrassed, or as embarrassed as an American girl of the era permits herself to be, because, when the music stopped for breath and the means of musical accord ceased, there arose the question of how the two were to communicate with each other. The French boy spoke English, hitting on about three cylinders, and she, in spite of a college education, broke out a type of French intelligible exclusively to herself.

In the emergency, he tried the expedient of talking French, which was intelligible to her, and she in turn came back with English, a tongue intelligible, under good weather and fast track, to him. The arrangement would undoubtedly have been an air-tight one had it not been for the fact that the girl could not really speak English. When she began telling him in her block-form dialect that things were "swell" and "awfully peculiar" and the like, he fired one gun and set the signal Man Overboard.

The point is that the modern mind seeks abbreviation, insists upon standardized forms to cover a whole sector of meanings, eliminating nuances and shadings as being too many things to bother with.

The girl was accustomed to use the word "swell" to cover meanings belonging to delicious, beautiful, entrancing, diverting, satisfactory, comforting and a hundred others, and one was supposed to know from her facial expression the exact meaning meant to be conveyed.

It is curious that we have the same tendency in architecture—that direct desire which causes the architect to say a door is a door, a window is a window, an ornament is an ornament, and that the effort to express them differently at different times by a change of vocabulary is too bothersome.

The downright, forcibly simple methods of architecture today ought not to cripple our architectural language so that the public will be unable to understand it. Architectural diction should not shrink to limit its message to "Dear public, this is a window," or, "This is a handrail," or, "This sequence is steps." Rather may our building language express ideas, which while obviously windows or handrails or flights of steps, are conceptions of beauty and charm.

May the grand old words of architecture not be discarded—the Erechthion doorway, the capital of the Tower of the Winds, the Piranesi eagle, and so on. Doubtless most of us can design better ones, in which case nothing is lost. But the fine words that have conveyed fine ideas to our fathers and our great-grandfathers ought not to be treated with anything approaching contempt. They represent a heritage of culture.

RECENTLY my good old evening clothes came out of lavender and moth-balls and, encasing the mature form with a somewhat more affectionate snugness than of yore, escorted me to a nicely put-on wedding. It was in an architectural church. The landscaping of the rood-screen and choir, the skillfully designed costuming of the bridal procession, made a pleasant and entertaining bit of pageantry.

But it was to me, withal, a regretful occasion, not because the union did not promise happiness but because that happiness had been so long delayed. There had been four years for a cultural degree, four years for a medical degree, and two years as an interne. The bride, a beautiful person, seemed to have lost, while waiting, some of that fair bloom of youth. Her bridesmaids were married and possessed children who were in the procession as incidental personnel, carrying flowers and things. There was this feeling of a happy event delayed.

I had the conviction of time squandered, of youth bartered for over-education. The first thirty years of a life—two lives—had been spent preparing for the rest—an expensive and abnormal percentage.

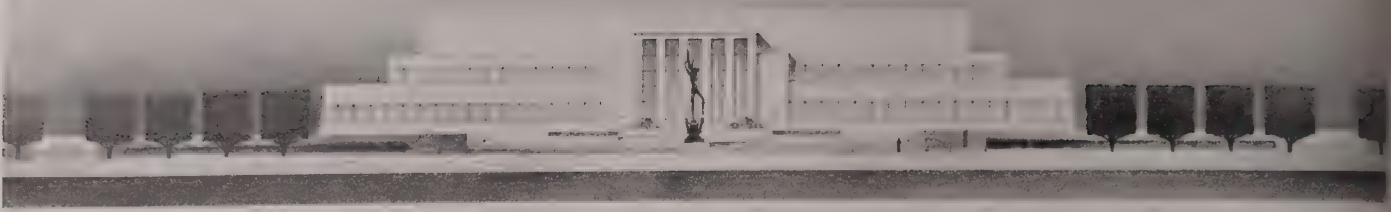
It has been my conviction that the trend of education is toward too many years of training. Not that years of training are not precious and valuable. But they ought to be weighed against the sacrifices—sacrifices of the parental exchequer and sacrifices of youth. The beginning of financial independence and the accompanying self-respect should not be set back too far. A righteous marriage should be possible while the hey-day is in the blood and before the hey-day seeks other channels.

Recently there has been a plan brought forth to increase the period of architectural education by a sort of interneship in an architect's office, following graduation from school. Such a plan should be considered carefully.

Persons charged with the responsibility should think well before endorsing any measure that in any way may have the effect of squandering youth, which is a heritage that cannot be spent wholly upon preparation for the business side of life. A man ought not to devote too much of his life to his profession. His fireside, his social and his cultural obligations have an equal claim upon him. His marriage should not be postponed so long that he approaches that limit beyond which he is less fitted to be in accord with his children, to be congenial with his wife, to build up that essential thing we call a home.

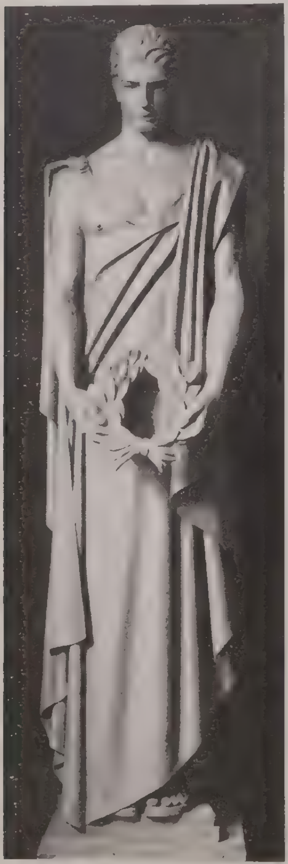
If it is found after investigation that architectural achievement bears a fairly constant ratio to years of training, consideration should certainly be given to lengthening the period of education, even at the cost of telescoping youth into middle age.

There are, however, so many shining lights of the profession who have had but a few years of theoretical training, but who have made these years very intensive. It is my opinion that a man who has the divine fire or even a steady enthusiasm will after four years of training carry on and unfold under the environment he makes for himself. I think compulsory post-graduate training will be of benefit mostly to the plodders who want some one to keep pointing out the path as long as possible. You don't have to worry about post-graduate education and development for the man with genius and understanding. He plans too far ahead of you for that.



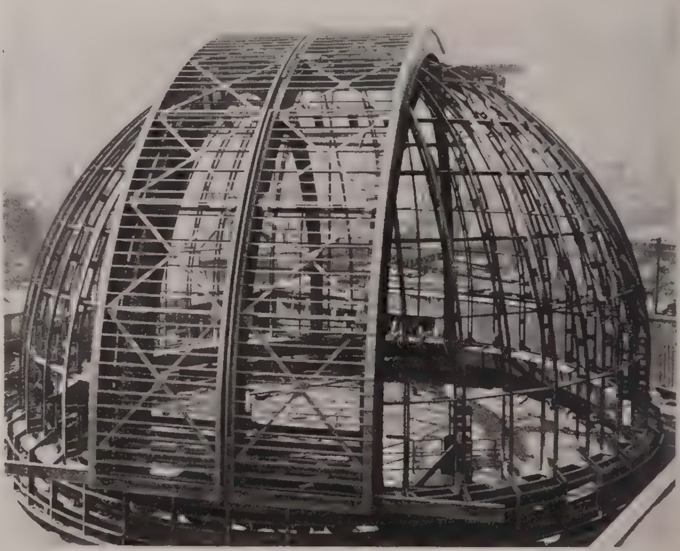
The winning design in the recent limited competition for proposed additions to the Art Institute of Chicago. The competition was won by Holabird & Root, this drawing showing the east elevation

Architectural News in Photographs

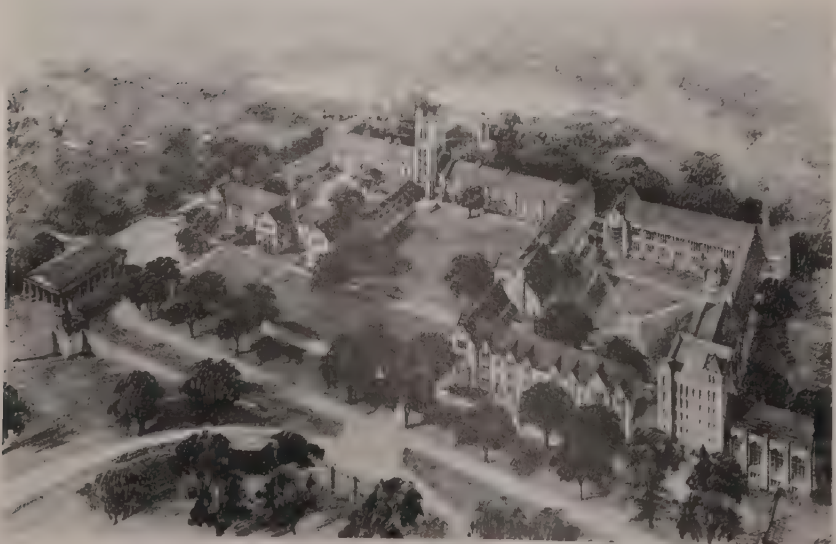


"Victory," recently placed on the Payne Whitney Memorial Gymnasium at Yale University. Edward Field Sanford, Jr., sculptor

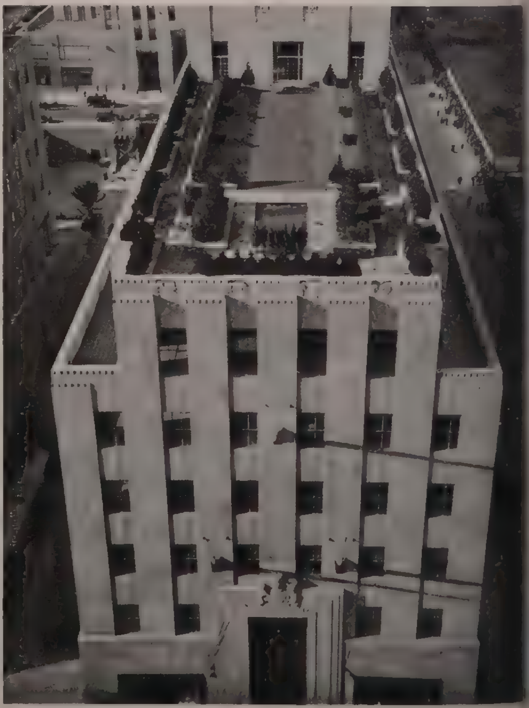
The temporary assembly of the structure for McDonald Observatory for the summit of Mt. Locke in southwestern Texas. Warner & Swasey Company, designers and engineers

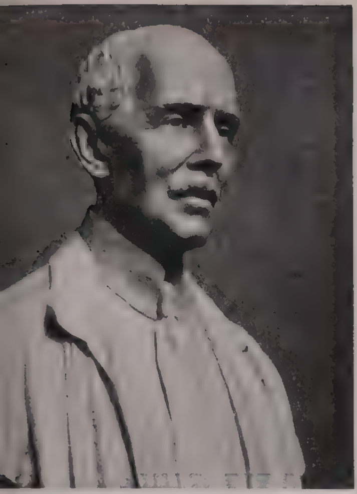


Proposed group for Bard College on the Hudson, a residential unit of Columbia University. Evans, Moore & Woodbridge, architects



Looking down upon the British Building in Rockefeller Center, showing the late Raymond Hood's roof garden idea





rtrait of Daniel Chester French
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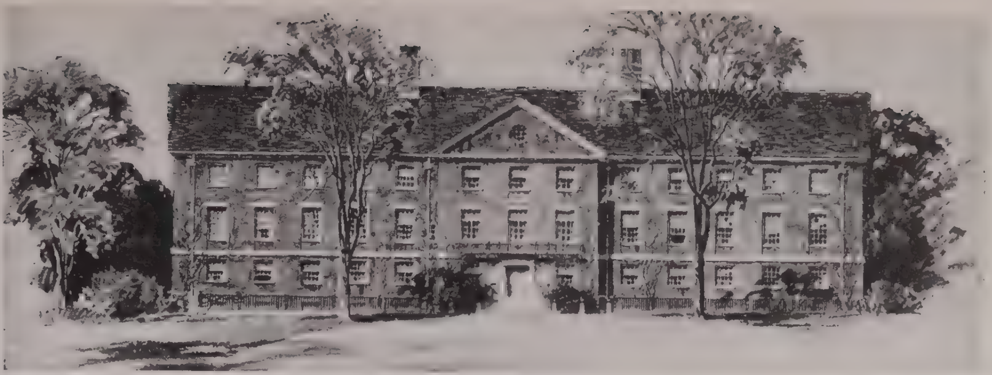
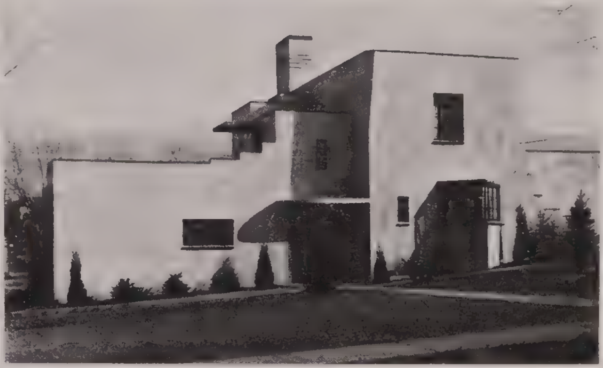
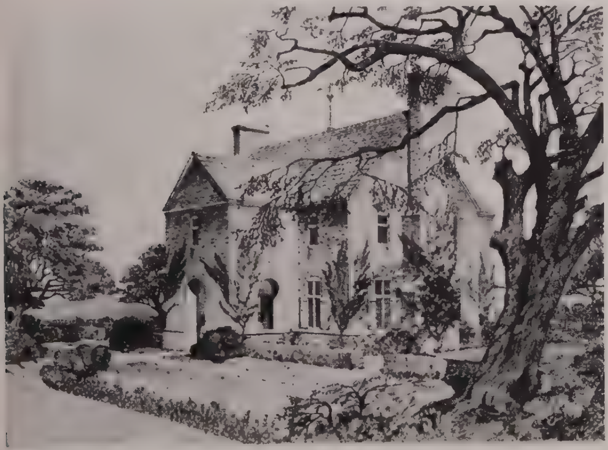


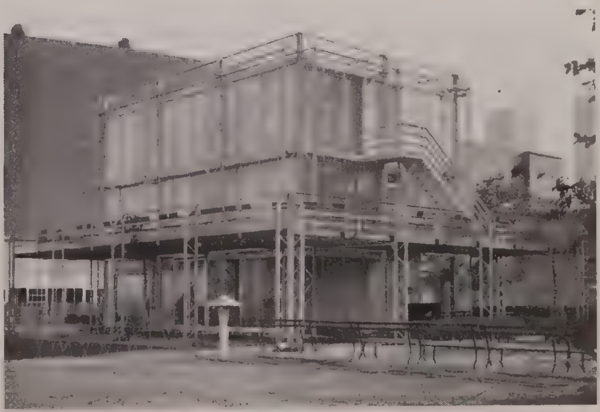
Headquarters Building for Governors Island, N. Y., now nearing completion. Lorimer Rich, architect



A house designed by R. F. Hennig, architect, and built by Omaha's Junior Chamber of Commerce, to promote home building. More than a thousand visitors a week paid admissions

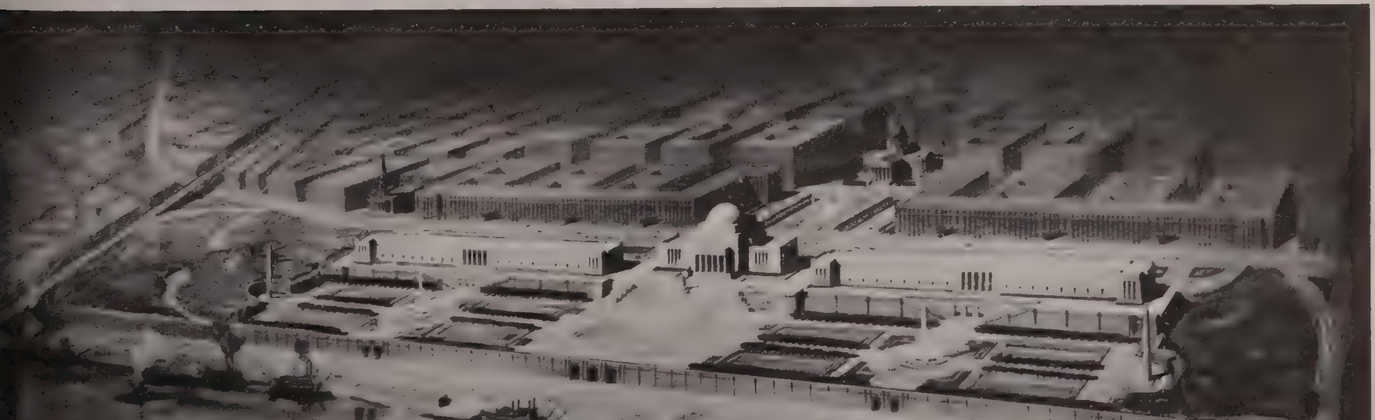


Preliminary perspective showing the restoration of Maryland's first State House at St. Mary's. Herbert Crisp and James R. Edmunds, Jr., and Horace W. Peasley, associate architects



A house at the Chicago Fair with steel supports outside. George Fred Keck, architect

proposed memorial to Thomas
efferson and our National Ex-
nsion, St. Louis. Le Beaume
& Klein, architects



BOOK REVIEWS

ECONOMIC RECONSTRUCTION. Report of the Columbia University Commission, ROBERT M. MACIVER, chairman. 250 pages, 6 by 9 inches. New York: 1934: Columbia University Press. $3.

About the first of 1933, President Butler appointed a commission of distinguished men to examine certain factors in our economic set-up: the price system, fluctuating relationships of income, consumption, price controls, present monetary systems, and the economic consequences of improved techniques. The commission in its findings has not hesitated to approve or condemn present practice, though in general it has indicated its sympathetic approval of our present great activity in fighting this and future depressions.

PUBLIC HOUSING SURVEYS. An Outline of Survey and Planning Procedure for Low-Cost Housing. 20 pages, 8½ by 10¾ inches. Pamphlet binding. Chicago: 1934: National Association of Housing Officials, 850 East 58th Street. Free to officials, 25 cents to others.

THE STORY OF ENGLAND'S ARCHITECTURE. By THOMAS E. TALLMADGE. 363 pages, 5¾ by 8½ inches. Illustrations from photographs and drawings. New York: 1934: W. W. Norton & Co., Inc. $4.

It is a fearless American indeed who would step into the field of English architectural literature, and essay to tell the whole story in a small volume. Certainly no Englishman has ever tackled the job, choosing instead to take some specific slice of it, into which he could delve to the last degree. Nevertheless, Mr. Tallmadge has performed a real service in bringing such an enormous field into sharp focus. He has, moreover, contributed greatly to the pleasure and convenience of the traveller through the arrangement of this book and his architectural map of England.

RADIUM PROTECTION FOR AMOUNTS UP TO 300 MILLIGRAMS. Bureau of Standards Handbook No. 18. 7 pages, 5 by 7½ inches. Pamphlet binding. Washington: 1934: U. S. Department of Commerce. 5 cents.

MODERN FURNISHING AND DECORATION. By DEREK PATMORE. 32 pages and 48 plates, 7¼ by 9¾ inches. Illustrations from photographs and paintings, many in color. Printed in Great Britain. New York: 1934: The Studio Publications, Inc. $4.50.

The author, who has also written "Color Schemes for the Modern Home," writes this book for the lay reader with the purpose of giving him or her a knowledge of the fundamentals that should govern the choice of interior decorative schemes and accessories. The color plates are very good, and the black-and-white illustrations, while thoroughly modern, are not too bizarre.

STADI. By GIUSEPPE DE FINETTI. 184 pages, 9 by 10¾ inches. Illustrations from photographs and drawings. Printed in Italy. Milano: 1934: Ulrico Hoepli. Lire 75.

A comprehensive survey of the stadium as found in all parts of the world, from those of ancient Rome to the latest college bowl. The work is not solely pictorial, but deals with circulation, construction, night lighting, and other aspects of the stadium. The text is in Italian.

TOWARD FULLER LIVING THROUGH PUBLIC HOUSING AND LEISURE TIME ACTIVITIES. By ABRAHAM GOLDFELD. 55 pages, 6 by 9 inches. Illustrations from photographs. Pamphlet binding. New York: 1934: The National Public Housing Conference. 25 cents.

Mr. Goldfeld, who has been supervisor of the Lavanburg Homes from the beginning, surveys five outstanding American experiments in organized community life. He comes right down to facts as to what kinds of playgrounds have best served the purposes, the actual needs for community meeting places, and similar questions.

VILLE. By BRUNO MORETTI. 171 pages, 9 by 10¾ inches. Illustrations from photographs and plans. Printed in Italy. Milano: 1934: Ulrico Hoepli. Lire 60.

The extremely modern country house as found in seventeen countries—the work of one hundred ten architects. The text is in Italian, and consists chiefly of short captions under the many illustrations. It is rather surprising to find among the American examples a house by Roger Bullard, which is as conventional as might be expected, being classified as modern by its white walls alone, apparently, though these are of whitewashed brick.

LOW-COST HOUSING AND SLUM CLEARANCE. Vol. 1, No. 2. March, 1934, of the quarterly publication, *Law and Contemporary Problems*. 256 pages, 7½ by 10½ inches. Pamphlet binding. Duke Station, Durham, N. C.: 1934: Duke University School of Law. 60 cents.

The second issue of Duke's new quarterly deals comprehensively with its subject. Those discussing various aspects of this immediate problem are Dr. Edith Elmer Wood, Carol Aronovici, Herbert U. Nelson, Earle S. Draper, Tracy B. Augur, Ernest J. Bohn, Ralph K. Chase, George W. Warnecke, Harold S. Buttenheim, Alfred Bettman, Coleman Woodbury, Walter H. Blucher, and Charles S. Ascher.

TEST OF A FLAT STEEL-PLATE FLOOR UNDER LOADS. By L. B. TUCKERMAN, A. H. STANG, and W. R. OSGOOD. 17 pages, 6 by 9¼ inches. Illustrations from diagrams and photographs. Research Paper RP662. Pamphlet binding. Washington: 1934: U. S. Department of Commerce. 5 cents.

Dealing with the battle-deck floor of 18 ft. span.

A Measuring Rod for Housing Projects

THE objective of a constructive housing program is to aid in securing an adequate supply of good dwellings distributed as to location, as to type (one-family, two-family, multi-family), as to size, and as to cost, in accordance with the needs of the population.

Beginning with the present supply this involves:

1. Utilization of existing dwellings that are in proper condition or that are worth the cost of repair or modernization.
2. Demolition of unfit dwellings that are not worth the cost of repair or modernization.
3. Erection of new dwellings to prevent a housing shortage.

The need for dwellings in different sections of the city should be determined by studies that will develop such factors as

Density of land occupancy.

Density of population and population trends.

Accessibility of centres of employment.

Accessibility of recreational, educational and shopping facilities.

Real estate prices and trends.

Rentals and rental trends.

Vacancies and doubling-up.

Physical condition of existing buildings, both as to structure and as to sanitation.

As a dwelling cannot be considered without reference to its neighborhood, the program must include reconstruction of whole areas.

Reconstruction of slums or decadent areas has a double purpose:

1. To convert a civic liability into an asset.
2. To make forever unavailable dwellings that are unfit for human habitation.

The reconstructed area may be devoted to residence purposes, or it may be devoted to other uses.

New dwellings, and new neighborhoods, must be not only an improvement upon those they supersede; they must be positively good. For if our standards are low we shall simply create areas that will soon become new slums.

The Measuring Rod

1. *Type of dwelling:*
Size of dwelling:
Cost of dwelling:

By *John Ihlder*

WASHINGTON COMMITTEE ON HOUSING

The one-family house is preferable, but the value of other types is recognized. The object is to maintain a proper proportion in accordance with community needs.

Size, like type, varies in accordance with the character and size of the group to be housed—single adults or families with small children.

Cost varies with ability to pay. But minimum standards must be maintained even at an economic loss.

Desirable type, size and cost of new dwellings is affected by present supply.

2. *Plan of dwelling:*

Room arrangement (sequence), light and ventilation (cross or through), equipment (sanitary, heating, lighting, laundry, kitchen) must be *good* no matter what the type, size or cost. The size of rooms, as well as the number, will vary in accordance with proposed occupancy (as, large kitchen for family with children where mother does all housework; small kitchen for childless groups; families with children require larger rooms as well as more rooms—generally speaking, small rooms are a false economy); height of ceilings will vary with type of dwelling, location and orientation (accessibility to breeze, cost of heating, etc.); closet space and arrangement vary with size of dwelling and economic status of occupants.

Reductions in initial costs must be weighed against future vacancies when the project has lost its freshness and tenants have a choice of other dwellings, as well as against repair bills.

Furnishability of rooms is important. Plans should show chief articles of furniture (drawn to scale) in place, to indicate that there is proper spacing. If few or no closets are provided wall space for a wardrobe or for hooks should be indicated.

Usability of space (organization of space) is important; arrangement of kitchen equipment to leave space for movement and yet save steps in routine; placing of laundry tubs in a separate room—perhaps a community laundry; accessibility of kitchen to outside door; accessibility of bathroom; concentration of plumbing—kitchen and bathroom; relation of kitchen to dining-room or dining-living-room (wide kitchen door to permit setting table in kitchen and then moving it into a cooler room for eating); arrangement of doors so they will not interfere with each other or with furniture; minimum of hall or other waste space.

3. *Construction:*

Construction must be in accordance with life expectancy of the building and with financing plan to amortize cost by end of life expectancy. Repairs to be at a minimum during period of life expectancy or to be provided for in financing plan.

4. *Lot occupancy:*

Low-cost houses and non-elevator multi-family dwellings. Standards for downtown urban neighborhoods: height limit, three stories (if four- or five-story multi-family walk-ups are built the two top stories should be duplexes—living-rooms on one floor, bedrooms above, so that there will be fewer stairs to reach apartment entrance); maximum lot occupancy 30 per cent (this may be increased to 40 per cent under exceptional conditions). Proponents of increases above three stories and 30 per cent are on the defensive and should produce evidence. When practicable the height should be reduced to two stories, which is usually the best height for both economic and social reasons.

If slum reconstruction results in the erection of higher cost, elevator apartment houses, new variables are introduced (as storage of automobiles of tenants, street widths, etc.) which make it difficult to formulate a rule. It is to be remembered, however, that increased density of population beyond a certain point rapidly increases community expenses. Consequently the maintenance of generous open spaces is economically as well as socially desirable. Experience seems to indicate that three stories is the highest economic limit for walk-ups and that seven or eight stories is the lowest economic limit for elevator apartments.

Points to consider in applying a rule, or exceptions, are: adequacy of surroundings and intersecting streets, height of nearby buildings, orientation, automobile parking space, neighborhood playgrounds.

5. *Boundaries:*

The boundaries of any project are of major importance. A boundary along a park or parkway, the grounds of a public institution, a waterfront or other natural protection against invasion by hostile uses, is a distinct advantage. A boundary on a traffic artery, provided the project proposes proper use for the artery frontage property, may be advantageous.

Lack of any definite boundaries, as a reconstructed area in the midst of a slum, is a disadvantage.

6. *Access:*

Not only ready access (rapid or short) but pleasant access to a project is an advantage; lack of such access, a great disadvantage.

7. *Location of site:*

In relation to
- population trends
- centres of employment, recreation, education
- city plan and traffic arteries
- neighborhood plan

It is helpful if certain factors in neighborhood life, as churches at one extreme and movies at the other, are already present. But they follow population, while accessibility to employment, to a sea beach, etc., determine the shift of population.

8. *Development of site:*

Does the project take full advantage of the natural advantages of the site, as by permitting free access of prevailing summer breezes to all dwellings, and, contrariwise, providing protection against winter winds; by opening views over a river or to a woods, by utilizing irregularities in the site to give variety, interest or charm?

Are the buildings so designed and arranged as to give interest and charm?

Such points as these may make the difference between financial success and financial failure of a project.

9. *Variations in size of dwellings:*

Unless there is convincing evidence that a particular kind of dwelling (as one- and two-room apartments with bath) will meet a very real need in the proposed location, there should be some variety in the accommodations provided by any project.

In a project that includes group houses or multi-family houses, it would be advantageous to plan the buildings so that the number of rooms given to a family may be increased or decreased by cutting doors through partition walls or by building an addition —provided there will remain ample open space.

10. *Comparison of costs:*

Construction; operation and maintenance.

Accuracy here is almost impossible, but there are some guides.

First: Reduction in construction costs may increase operation or maintenance costs.

Second: Cost per cubic foot of building is not identical with cost per cubic foot of rentable area.

Third: The fewer rooms per dwelling — and therefore per kitchen and bathroom, the higher the cost per room.

Fourth: The smaller the rooms, especially in multi-family houses, the higher the cost per cubic foot of rentable area because of cost of walls, public stairs and halls, etc.

Fifth: Lighting, cleaning, maintaining public spaces (halls, stairs, etc.) cost in proportion to the area of these spaces in comparison with rentable room area.

On the other hand, heating and painting, papering or redecorating is a function of room size and area of walls and ceiling. Yet these costs again are modified by the fact that it is easier (and cheaper when done at company expense) to clean good-sized rooms in which furniture may be easily moved, than small ones.

The net result is, cramping of space is not economical.

All statements as to rent per room (or per cubic foot) should be supplemented with statements as to whether heat, hot water, gas, electricity, or other facilities are included.

11. *Size of project:*

All the area to be covered by a project should be developed as rapidly as possible—interest and taxes on vacant land are a heavy burden.

From the management point of view, a project should have at least three hundred dwellings in order to carry necessary overhead, support an adequate staff.

If the carrying charges of land could be disregarded, the cheapest way to build detached, frame cottages is house by house, with a small crew of three or four men. But if the operation is to be on a considerable scale, it should be on a really large scale because of possible economies in construction.

Moreover a large-scale operation permits of including community features—common laundry, central heating, playground for small children, tennis courts, etc., that add to rentability.

12. *Management:*

With a project should be submitted a plan for management that will give evidence of efficient and economical operation and maintenance.

13. *Cost of site:*

The permissible cost of site (cost per square foot) will, of course, vary with the proposed type and quality of development. Whether or not the cost is allowable may be checked by ascertaining the probable income (allowing for vacancies), estimating the total costs of construction, utilities and other expenditures, and then adding the cost of the site. The estimated income under government financing should yield from 8½ per cent to 10 per cent gross on *all* costs. Under private financing the gross yield is usually figured at 12 per cent to 14 per cent.

14. *Character of site:*

The character of the site, rocky, swampy, filled land, etc.—affects cost of site. So, definite information should be submitted together with information on proposed method of development.

15. *Amenities:*

As the fundamental purpose of a housing program is to improve living conditions, definite attention should be given to provision for recreational and social needs, such as a playground for small children, safety of life, access to schools, recreation centre, etc., without crossing a traffic street, etc.

Modular Masonry and the Small House

By Willard H. Bennett

THE opinion has been repeatedly expressed that the most immediate hope for the restoration of the building industry lies in housing and in the small-house field. For the launching and carrying on of this program improved quality of buildings at reduced cost is essential. This is not to be satisfactorily achieved by a standardization of houses which ignores the inherent desire of every one for an individual home embodying his own ideals. Neither by attempting such makeshift methods as reversed plans nor by assembling an unrelated group of catalogued details will this desire be satisfied. The end will be attained rather by a standardization of materials and methods of construction which, while they achieve the desired ends of quality and economy, still leave the designer free to adapt his plan to the physical surroundings and develop it according to the peculiar desires of its future tenant.

In a recent survey in Syracuse, N. Y., conducted to ascertain the sentiment of architects, builders, and material manufacturers as to the possibility of arriving at a standard modular unit to be used for certain manufactured building materials, the opinion was generally expressed that the idea was practical and, if generally adopted, would result in considerable economy, not only in the preparation of plans, but in the laying out and erection of buildings, and in the minimizing of mistakes due to complicated and intricate dimensions. The Survey Committee in its report, which was published in a recent issue of this magazine, recommended the adoption of a vertical module of 8 inches and a horizontal module of 4 inches, the dimension being taken from centre to centre of masonry joints in both cases.

These dimensions vary so slightly from the present practice in brick and block construction that no radical changes in equipment or methods of manufacture would be required in the production of these materials, and it was believed that the simplification of building construction, due to the elimination of cumulative fractional dimensions now encountered, would be most desirable.

However, it was almost unanimously believed by the architects who were consulted in the survey that the modular idea was not adaptable to residence work, as it was felt that any effort to adhere to a fixed unit of measure would restrict the freedom of design which lends so much charm to our domestic work. Although the writer of this article at first concurred in this opinion, the possible benefits of the modular system seemed to warrant some further practical investigation of it in connection with some other research work looking toward economy in small-house design. Accordingly a problem was assumed, presenting what was felt to be the most adverse conditions: a small house of irregular plan to be erected on a sloping lot. A careful study was made and working drawings and sufficient details were prepared to make sure that a practical solution had been reached. In the accompanying illustrations a cross-section modular chart, divided into 8-inch modules and dimensioned every 2′ 0″, has been substituted for working dimensions as better illustrating the methods of modular design.

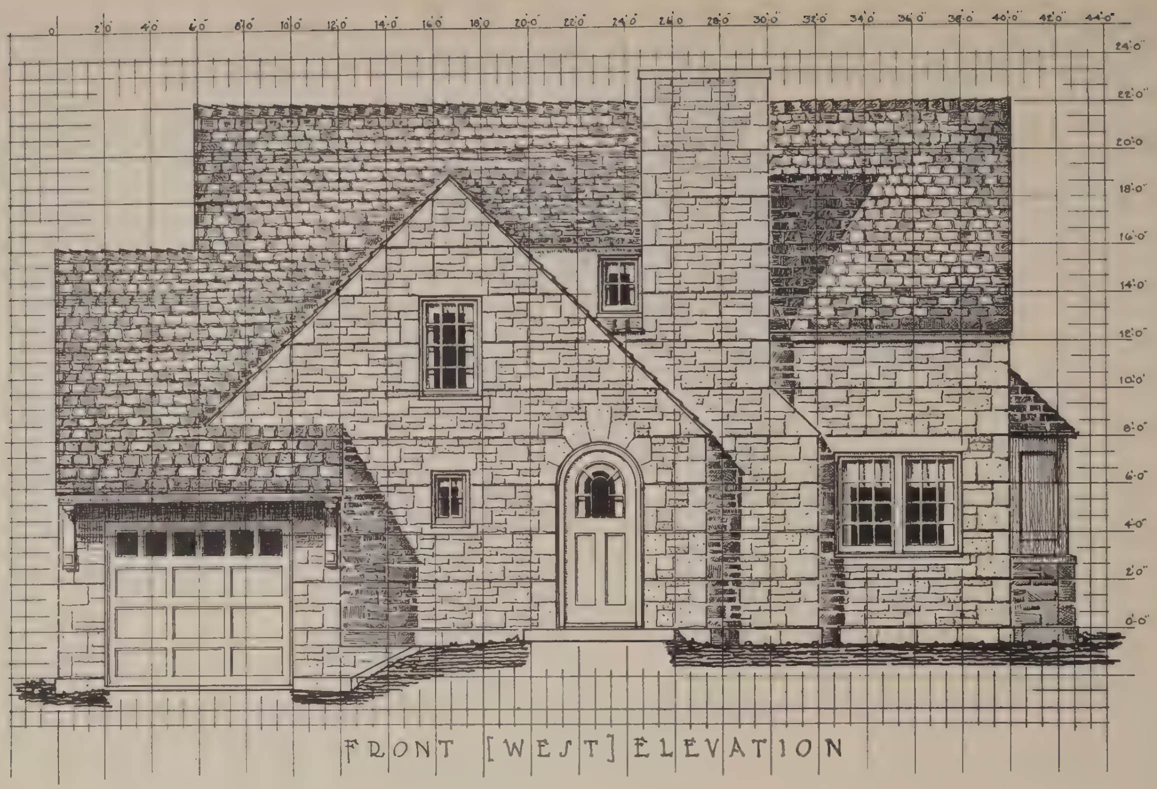
The original plans were made without any reference to modular dimensions, as it was desired to discover how much difficulty would be encountered in developing in modular design the present system of preliminary sketches.

The floor plans and elevations of the original scheme, drawn at ¼″ scale on tracing paper, were placed over a cross-section chart divided into 8″ vertical and 4″ horizontal modules, and the plans were redrawn to conform to these modular units. The resulting changes from the original dimensions were surprisingly few and in no case involved any radical departure, consisting usually of a shift of two or three inches in the location of openings and a slight increase or decrease in room sizes. No difficulty was experienced in maintaining axes or centre lines in plans or elevations.

The exterior walls were planned to be laid up of integrally faced masonry blocks 8″ in thickness. Four sizes of blocks were used: 8″ x 16″, 4″ x 8″, 4″ x 12″, and 4″ x 16″; to be laid up in ashlar with through courses every 12″ in height to line with the quoins. By maintaining a regular sequence of blocks in each course and staggering the dominant blocks in adjoining courses a good effect of random ashlar can be achieved in a simple and economical manner. Also if the number of various-sized blocks for each three or four feet of course be predetermined, the problem of ordering the correct number of each and laying them without waste becomes greatly simplified. The variety of ashlar patterns possible with the above sizes of blocks seems large enough to satisfy all requirements of design. The height of the through courses could be varied, or they could be entirely eliminated, and the proportion of blocks forming the pattern be determined per square foot of wall area, possibly 4′–0″ x 4′–0″, according to the designer's wishes. At any rate it would seem that the problem of ordering the proper proportions of sizes, and of laying them without undue waste of time for sorting and fitting, can be satisfactorily solved if modular dimensions be adopted.

The corner quoins and the triangular gable quoins can be classed as semi-standardized sizes, inasmuch as they are repetitive for this job. The trim around the circular head of the entrance door is in reality the only special masonry required. The window heads and sills can also be listed as semi-standardized, as they can be reduced to a comparatively few lengths. Sash have been limited to two widths: 1′ 8″, using two 8″ panes of glass; and 2′ 4″, using three 8″ panes of glass. With the customary allowance of 2 inches for wood jambs, the masonry openings become respectively 2′ 0″ and 2′ 8″ wide. By making the wood mullions 4″ in width the masonry openings, where they occur, would still be kept at the 4″ modular interval. For window heights it was found desirable in some cases to split in half the 8″ vertical module. This permitted establishing the first and second floor window heads at 7′ 0″ and 6′ 8″ from the respective floors, and also gave greater flexibility in adjusting heights of openings to utilize standard glass and sash sizes.

Some critics may object to a roof pitch of 45 degrees as not being a line of beauty. If so the answer is



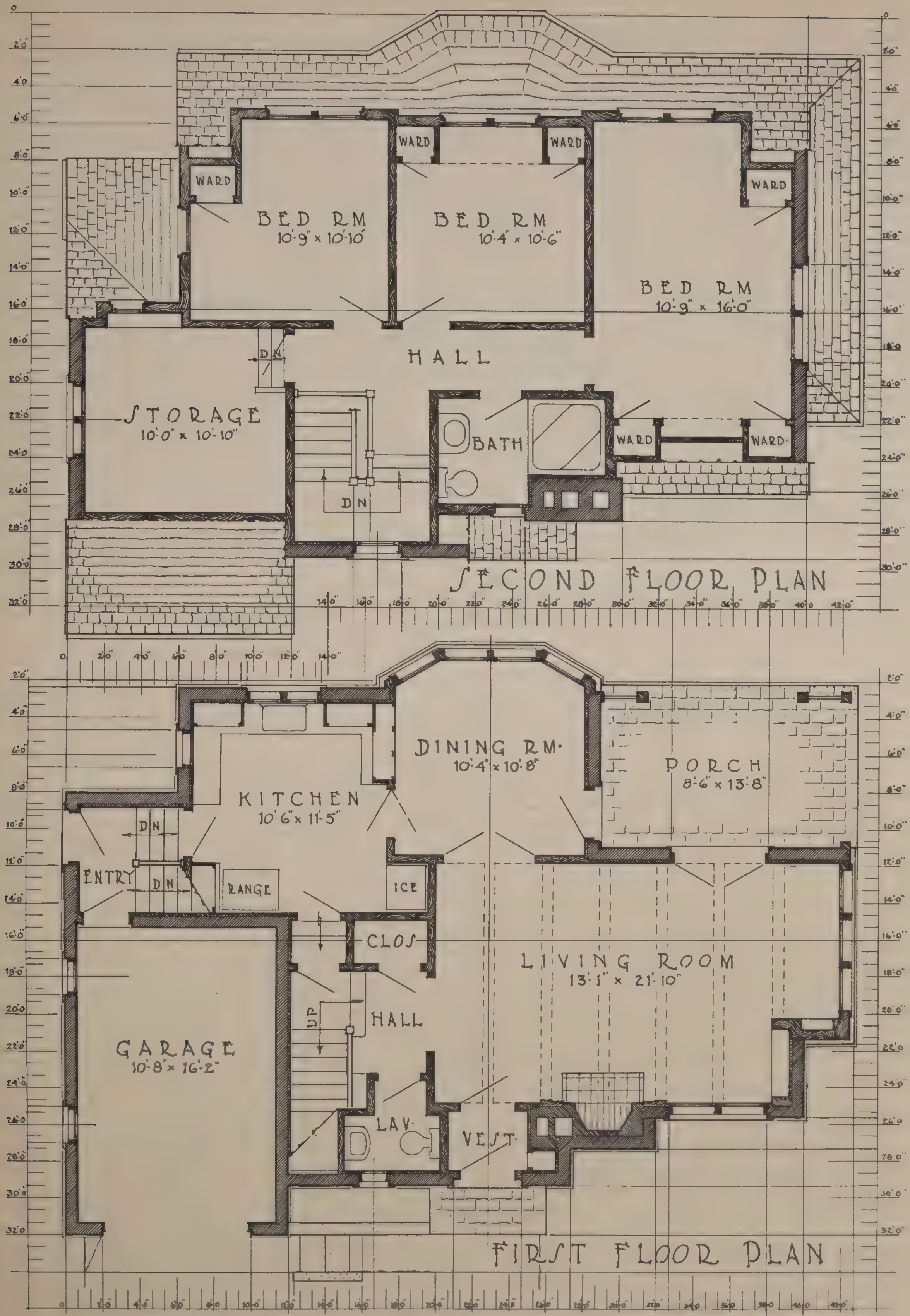
Front elevation, on which is superimposed the modular scale with the squares representing 4", reproduced at a scale of 1/8" to the foot

that its solid practical advantages outweigh any possible esthetic loss. First, it permits the standardization of the triangular gable blocks, with a consequent saving in the cost of manufacture; second, the ashlar pattern in the gables will always work out properly in length without cutting or fitting blocks; third, the several varying wall heights for the roof plate will work out exactly in vertical modules and can very easily be determined and dimensioned on working drawings. If a flatter roof pitch be desired as a matter of design most of the above-named advantages can be retained by keeping the pitch in some easily workable modular proportion.

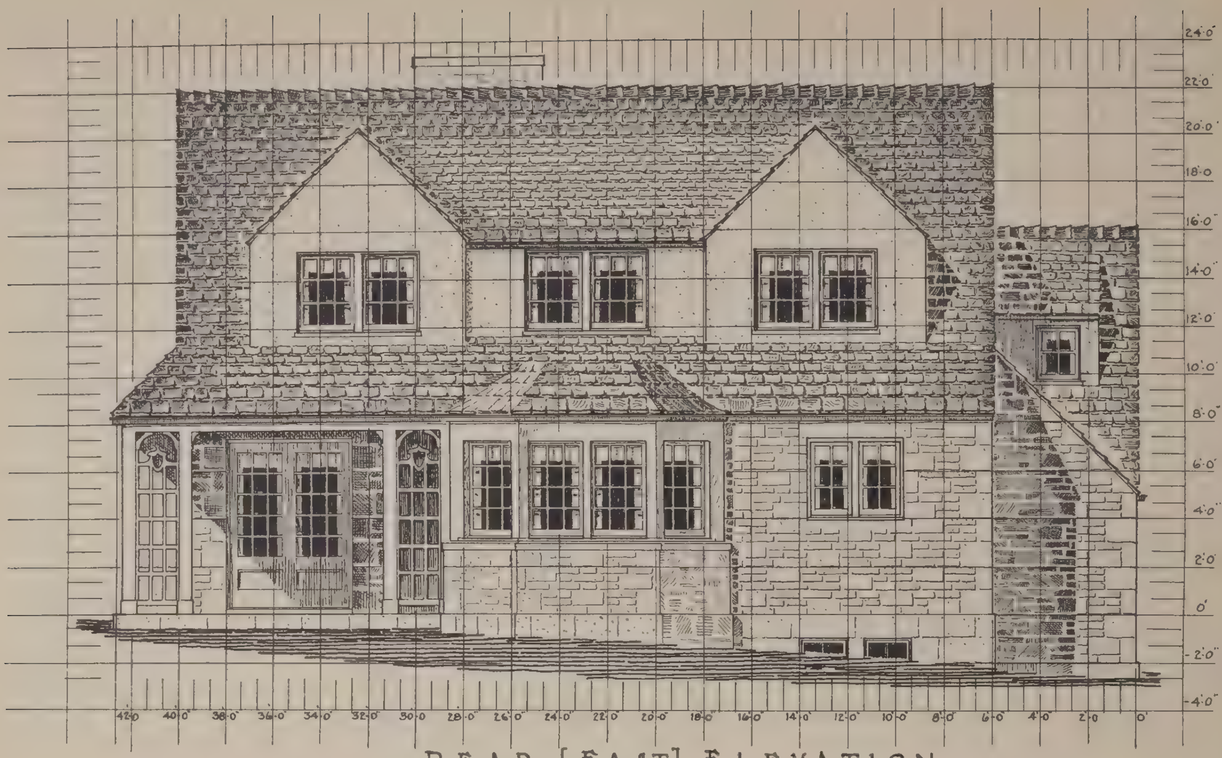
Personal investigation is the best answer to each doubtful designer. In addition to the unquestioned economy in the manufacture of materials and the simplicity of assembling them on the job, experiments with a modular cross-section chart will reveal to the architect many unsuspected virtues in its use in the preparation of plans. Heights of doors and windows, once established, are easily located on all elevations at the correct modular height; the correct horizontal location of walls to bring the roof plate at the desired level is quickly determined; full-size details for cornices, door and window trim can be standardized with the certainty that they will accurately fit, and not have to be altered at the job with a corresponding loss of time and temper; the chances of error in hastily scaled dimensions from the wrong base line are eliminated, and dimensions on the final plans are quickly and accurately checked. These and other advantages will become apparent to the designer who investigates the modular system with an open mind.

If the value of the modular system be admitted, the next step is to determine the unit which will achieve the best results. Brick, block, sash, and other material manufacturers are all anxious to adopt a unit which will cause the least disruption to their own processes of manufacture. One agency now investigating this question is advocating a module based on the present theoretically standardized brick size. But with actual brick sizes varying according to type of brick and locality of manufacture, is any pronounced advantage to be gained either by the brick manufacturers or the construction industry as a whole, by the adoption of a unit which retains the present minute fractional dimensions, cumbersome to use and a constant invitation to error? Is it not more logical to adopt a unit based on even inches as is given herewith, which will be infinitely easier to work with, greatly reduce the chance of error, simplify every branch of practice, and finally, which will not penalize one manufacturing industry for the benefit of another?

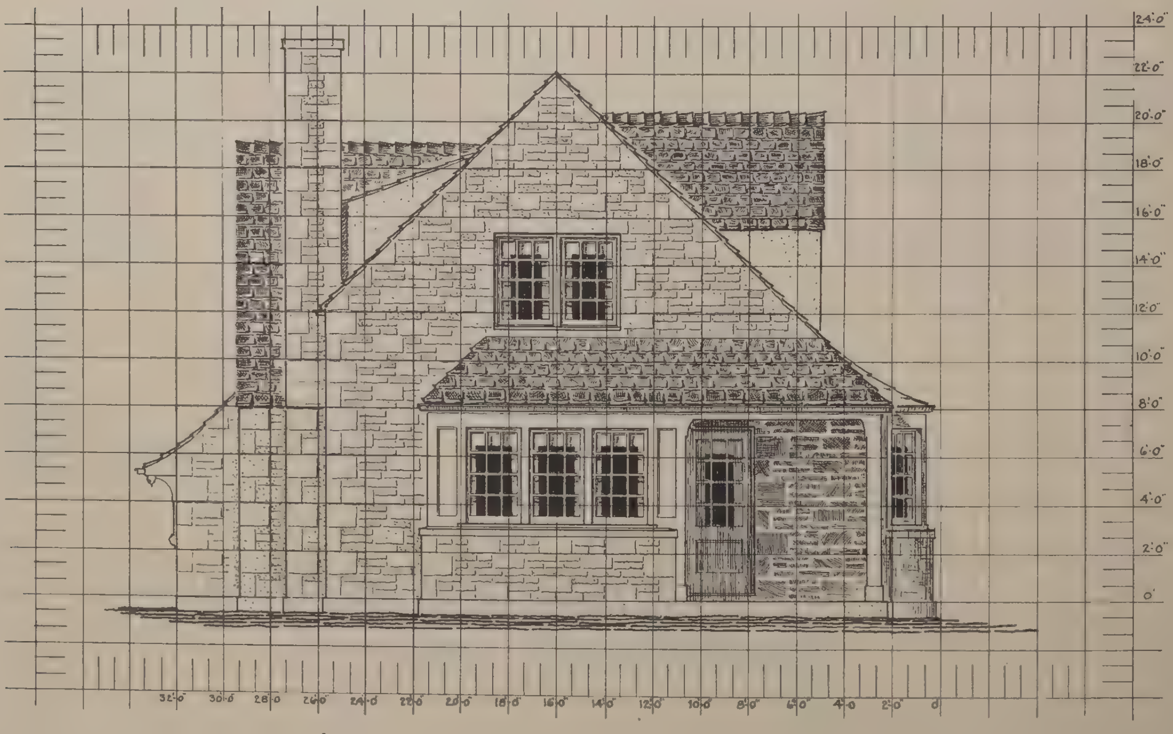
The American Institute of Architects at their last convention adopted a guarded resolution endorsing standardization of materials, but did not suggest any definite program or take action toward formulating one. If, as seems quite probable, some sort of modular system is to be adopted, the architects as a national group are missing a great opportunity to serve the building industry, and themselves as well, if they do not investigate and present some constructive suggestions along that line. Interested in no one material, but as co-ordinators of all materials, they are best qualified to bring to this problem the unbiased decisions and technical knowledge to assure its ultimate success.



After the quarter-inch scale plans had been established in the ordinary way on tracing paper, these were laid over the modular scale, and it was found that very slight alterations were needed to make all the dimensions conform to the module



REAR [EAST] ELEVATION



END [SOUTH] ELEVATION

W. H. BENNETT, ARCHT.
SYRACUSE, N. Y.

The architect has taken a difficult problem for translating into the modular system of dimensions, particularly as to his quoins and ashlar masonry

Simplifying Small House Practice

IT has been repeatedly demonstrated that architects cannot execute small house commissions at a profit. The demonstrations have been based on the records of business-like and reputable members of the profession. But the majority of architects have not needed any cost records to keep them out of this field; the size of the individual project was sufficiently small to make the work unattractive. In spite of a few noteworthy exceptions, the result has been that other methods have been used to build our small homes. The "stock plan" flourished, sponsored by lumber dealers, brick manufacturers, magazines, plan book architects, and even the A. I. A; small builders and hack draftsmen modified the stock plans and drew up "special plans." A part of the work was absorbed by the pre-cut and pre-fabricated wood frame house.

Before the depression we accepted all of this as inevitable; today many of us are not so sure that this type of work should be avoided by architects. Realizing the great potential volume and the inadequate results which the speculators, builders and manufacturers have given us, some architects seem to believe that the answer lies in the development of pre-fabricated houses. The achievements along these lines thus far are negligible; the economic and social obstacles are probably insurmountable. The present writer and his associates in practice believe that the basic principles of analysis, planning, and design, which are the essence of architecture, should and can be applied to small home building. The profession at large has assumed that this cannot be done; we believe that much of the difficulty can be attributed to the methods of practice in common use. The office routine developed in executing large commissions becomes a cumbersome and inefficient procedure when small homes are being designed.

Waste, duplicated profits, and overhead can be eliminated, at least in part, from the construction process, but these questions will not be dealt with here. This discussion is confined to the production of contract documents. Even a hurried analysis will show that much of the work can be standardized without resorting to the stock plan or the

By Harrison Gill

of Craft, Gill & Walsh, architects

pre-fabricated house. Methods of work must be studied from a production standpoint, suiting the process to the quantity used. Before a contract can be let we must assemble information, analyze it and compile an intelligible documentary record.

CONFERENCES

Much of an architect's time is consumed in conferences with client and employees. The most helpful aid in cutting this time to a minimum has been found in the use of checking lists and questionnaires. Carbon copies can be used when testing a list; mimeographs will be cheaper once an adequate form is developed; printing may be used for standardized sheets available to all architects. The first tabulation of this type would cover the information required before sketches are made. They can be grouped under the general headings of: site, inhabitants, budget, design. Whether the site is visited or merely a survey used, notes must be secured on location, size, orientation, conformation, vegetation, public utilities, and special features.

Full information about the family is often difficult to secure from the prospective small-home owner. There seems to be a natural reticence which must be pierced. Full details as to number, ages, sexes, conditions of health, possibilities of increase or contraction in size of family, types of entertaining and provisions for guests contemplated, who is to perform the various tasks of maintenance and service, as well as any special interests or hobbies of the occupants, should be known. Too often we ask: How many rooms?—rather than the who and how of function. Whether the lists are developed in the form of questions to be filled in by the owner or as a reminder for the interviewer, they should be as exhaustive as possible so as to insure full information before starting sketches and to hold the number of conferences to a minimum.

It is almost as difficult to secure full and accurate information from a client on financing as on the details of his family. A full statement of resources available, methods of financing and proportion of income to be assigned to maintenance should be known. Strong prejudices and preferences as to design must be brought out. No two sets of answers will ever be alike, no stereotyped solution will ever fit exactly, but with all of the information secured quickly and tabulated in an orderly way, a more nearly complete analysis can be made, and many changes, which often develop from unforeseen factors, can be avoided.

After sketches are approved and before the contract documents are prepared, another type of list may be used. This would be a checking list for specification items. They can be placed under three general headings: building materials, finishes, and mechanical equipment. When filling out this list it is well to have some system of notation which indicates which items are being left to the architect's discretion and which are being selected by the owner. Even if the list cannot be fully answered at the first attempt, notation should be made as to whether architect or client is to secure the missing information. In this way the list may serve as a follow-up or reminder to insure that all questions have been settled.

A final list for the use of draftsmen and the specification writer can be developed and used merely as a check against the completeness of the documents. One copy for each member of the organization may suffice, or one may be used for each job, on which items which do not apply can be lined out and items complied with checked.

In general the purpose of these sheets is to limit, as far as possible, the time spent in conferences with clients and associates, without losing the flexibility of the individual solution, or injuring the consulting service of the firm. It has been found that the most garrulous client can be held to reasonable time limits in this way, without creating the unfavorable reaction which may come from the arbitrary limit to conference time which some architectural firms in this field of work have used.

DRAWINGS

The methods of studying preliminary sketches will differ with each designer, as well as the methods of presentation. Some find the use of cross-section paper a time saver, others work just as fast with a scale. Basic arrangements in graphic form may be desirable, though the more experienced designer of small houses often finds them superfluous. But all of these points depend so much on the individual that any generalizations may become inaccurate. In this stage of analysis and creation there are probably no sure short cuts. Though the problem of designing small houses is one of the most complex and exacting in architectural practice, the type of presentation drawing shown the client may be the most simple. The architect in this field is not designing a luxury; elaborate and costly renderings are not expected by the client and cannot be afforded. The technique will vary with the individual, but it is seldom necessary to carry a rendering beyond the stage desirable for purposes of study. In some cases this may be only a line drawing in pencil.

The quarter-inch-scale working drawing seems still to be the best. It may be possible to develop a method of indication which will prove satisfactory for eighth-scale plans and elevations, but it is difficult to make them complete, and they are apt to be confusing to the type of mechanic who will have to read them. All superfluous lines in indication may be omitted, only a minimum for readability being retained; elaborate draftsmanship is certainly out of place here.

Details of structural conditions should be included in section on the drawings. We have found a scale of one and one-half inches to the foot convenient, as it eliminates the full-size detail when stock millwork is being used. A master sheet can be prepared showing most of the usual conditions; the portions which apply to any particular house can be quickly traced upon the margins of plan and elevation sheets. This has been found more flexible than using a sheet of standardized details, to be bound in with each set of drawings. Special interior features may be drawn in elevation at quarter-inch or half-inch scale. With drawings prepared in this way, and by using stock millwork, very little later detailing will be required. The chimney and fireplace are items which can be varied considerably, so that no attempt need be made to standardize them; the details may be left until after contracts are let. But in general the architectural effect must depend on the use of standardized units proportioned and arranged in various ways, rather than in refinement of moldings, or special ornament.

On the working drawings may be included several schedules. Master forms for these may be blocked out in ink and traced for each job, or more time can be saved by using rubber stamps. If the stamp is prepared with only the title and subheading, leaving lines to the draftsman, it can be bought at small expense. These schedules may include: doors, windows, interior and exterior finishes, structural materials, sizes of framing members, cabinet and closet equipment, plumbing fixtures, heating units, etc. Such items would not be repeated in the specification.

There is no real value today in the uniform sheet size. When expensive cloth tracings were in more general use, vertical filing and standard sheets were desirable, but paper tracings of any size can be conveniently filed in uniform-sized envelopes. Blueprints are bought and sold on a square-foot basis, so that the smallest possible area for a set of drawings becomes the most economical for reproduction.

SPECIFICATIONS

It is probable that specifications will lend themselves more than anything else to standardization, but to do this we must revise our ideas of the function and purpose of the specification. Many small houses have been built without any specification other than a list of items included in a builder's proposal to the owner. Naturally this makes it impossible to compare bids equitably or to control the quality of material and workmanship, though the system may be capable of giving a measure of superficial satisfaction to the home owner. If we restrict the specification to standardizing the quality, but avoiding detailed descriptions, we shall be able to develop a series of basic specifications for the various trades which can be reproduced by mimeographing or, if quantities permit, by printing. A careful study of any series of good specifications will show that a large proportion of it is repeated on every job—verbatim; that certain phrases and parts of clauses occur more than once in a single specification. By using mimeographed sheets covering various types of construction and the several trades, it becomes possible to assemble a specification of this type in a few minutes.

Aside from questions of quality there are only three other points to be considered: location of various materials and finishes; sizes of units; and specific types of units. Nearly all of this information can be covered by the drawings in schedules and notes as described above. It may prove desirable to include some of it as special sheets in the bound specification. But in general those notes which cover location, finish, and type can be more quickly recorded on the drawings than they can be incorporated in a special specification, thus eliminating typist's time and additional pages for reproduction.

CONCLUSION

The design and preparation of documents for a small house challenge the best ability of experienced architects. Proficiency in handling large projects by no means indicates qualification for this type of work. One of the objectives which must be kept in mind, if one is to succeed in the small-house field, is to develop a method of practice which makes it possible to use a certain proportion of younger and less experienced draftsmen. In handling a large commission this is automatically accomplished by the large amount of tracing and indication of repeating units which can be delegated to juniors. The use of standardized details, schedules and checking lists makes a similar handling of personnel possible in the drafting-room where small-house drawings are prepared, without leaving the more difficult problems of analysis and design to inexperienced assistants. From the viewpoint of investment it is possible that the small-house field will form the largest portion of building volume for several years; if any large proportion of this work is to be undertaken by architects, more efficient methods must be used, and room must be made for the apprentice and junior draftsman, without lowering the standards of the individual solution for the special requirements of each client.

The Editor's Diary

Wednesday, August 1.—It is curious, when you come to think of it, that after having used concrete more or less spasmodically since the early days of Rome, we are only now beginning to learn the more important elements of its technique. The water-cement ratio is a vital factor, and yet we have only recently come to realize this. And now the utilization of vibration as a factor in pouring concrete assumes a new and probably vital importance. Vibration adds no new qualities to concrete, but it does make possible the proper placement of a stiffer and harsher mixture, which in turn insures a stronger, denser wall.

Thursday, August 2.—There seems to be an almost impenetrable air of mystery enshrouding the executive order issued a few weeks ago in the Treasury Department to the effect that hereafter no private architects will be commissioned to design public buildings. The rumor is to the effect that the order originated with Mr. Morgenthau as a somewhat impetuous act of self-defense in the face of a barrage of political appeals for appointments of this kind. Just what it will do to the architectural profession as a whole remains to be seen.

Saturday, August 4.—One would think that with all the new buildings that have been put up in Washington within the last three or four years, the needs of the government would have been rather well served. I see, however, that Secretary Ickes is going to put up another ten-million-dollar building for the Interior Department just south of the present structure, which is at 18th and F Streets.

Monday, August 6.—I have always had the highest respect and admiration for Dr. Robert A. Millikan. He is unquestionably one of the great thinkers of our time. Therefore, I am much disturbed by a statement that he makes today:

"I cannot find anywhere any statistical evidence that when general trends are studied the machine ever fails to create more employment than it destroys."

That statement is contrary to the beliefs held by most of the economists and students of our machine age. President Hoover's Research Committee on Social Trends says on this point:

"Such studies as we have of this phenomenon of technological unemployment throw considerable light on the whole problem of adjustment. Thus in one sample of displaced workers from numerous trades, of those who found jobs, less than a third returned to their old industries, while the rest found work in new industries. A small portion did a similar type of work in the new industries in which they were employed. Another study in the clothing industry disclosed that only one-fifth of the displaced cutters were able to find work in their former occupations. In both cases, also, a substantial proportion of the workers studied suffered long periods of unemployment, exceeding in some instances one year's duration. Aside from the possibility that the pace of the future mechanization of industry may make the permanent displacement of labor a serious problem not encountered in this form in the past, temporary displacement involving both unemployment and absorption into new industries is already a problem of increasing gravity."

Tuesday, August 7.—I had a letter from a subscriber today who berated us for "attacks on the 'International Style' and rational architecture." We plead not guilty, and in rebuttal have written our critic somewhat as follows. The whole history of civilization shows no single instance of an abrupt change in an architectural style. Changes have always been rather a matter of slow growth. The style, therefore, that has been called International, we would say, is not an achieved architectural style, but rather a mere phase in the gradual evolution of what may perhaps become a style. In the second place, we quarrel with the "Internationalist" on the basis of his own premises. In effect he seems to say that if a structure serves perfectly the material functional requirements it necessarily must be a work of art. In so claiming he apparently ignores a necessity in mankind that must be satisfied no less than the need for shelter and other material needs—the need for beauty. We have no quarrel whatever with an architecture which strives to satisfy practical *and esthetic* needs with the new materials and new methods that science and invention are constantly offering us.

Friday, August 10.—All that I hear talked about among the architects at the moment is the far-reaching significance of the Treasury Department's reversal of policy. Architectural and engineering draftsmen are marching on Washington to answer the call for an expanded organization in the Supervising Architect's office. Officially, I understand, a call has been issued for eighty-seven architectural draftsmen, thirty-five structural engineering draftsmen, twenty draftsmen for heating, ventilating, and plumbing, eight draftsmen for electrical work, and twelve specification writers. Salaries range from $2,600 to $3,200 a year, and are less 5 per cent.

Saturday, August 11.—The age-old war against design piracy is becoming more active. One of the latest guns fired was that aimed by the National Alliance of Art and Industry, which announces the formation of a design registration bureau. Pending effective legislation, the Alliance cannot bring suit against the copyist, but it can and will ask for an explanation from the offender when piracy has been proved. Of course, there is an additional deterrent effect in that, as experience has proven, a copyist hesitates when confronted with a design that is dated and registered.

Monday, August 13.—King Leopold presided over the inauguration ceremonies the other day when the belfry tower of the Cloth Hall in Ypres was officially declared rebuilt. Funds were available for the building only of the tower, the broken Cloth Hall itself remaining a sad reminder of the Great War.

Tuesday, August 14.—Raymond Hood died this morning. Here ended the blazing path of a comet across the architectural skies. Hood's contributions to American architecture, progressing as they have from the traditional to dazzling experiments in verticality, horizontality, and color, reflect very clearly the independence and originality of his mind. Just because a thing had been done this way since man could remember, was no reason whatever for doing it that way again, in Hood's thought—in fact it might be a very good reason for doing it otherwise. Rayne Adams, it seems to me, summed up Raymond Hood's philosophy of design rather neatly when he said:

"Hood long ago took for his patron saint in architecture one whose name is Whim. This patron, however, has another name, though Hood doesn't know it. That name is Reason. And the most interesting thing about Hood's attitude toward architecture is that his reasons are whimsical and his whims reasonable. . . . For years Hood has practised the trick of turning all his thoughts, as it were, inside out, to see what is on the other side. Suppose that it be asserted that St. Peter's in Rome looks well as it stands; the instant question arises, would it look better upside down?"

Those who knew Raymond Hood knew that from him they could always have an honest opinion, scorching though it might be, and that his thoughts were always ranging forward, like a setter dog in the autumn woods, recording impressions, theories, convictions that came, if at all, much more slowly to the rest of us.

Thursday, August 16.—Motored with Ely Kahn up to Stamford, Conn., to Raymond Hood's funeral, where we were joined by John Mead Howells, Lee Lawrie, Frederic Hirons, and Harold Tatton in the sad journey over to Tarrytown—a dark day indeed, within and without. As the rector pronounced the benediction in the commitment, Mrs. Hood gathered an armful of flowers from the great pile that surrounded the casket, walked the few yards to Joe Urban's grave, and put them upon it. The two friends and brilliant geniuses lie side by side under the edge of a hill in Sleepy Hollow Cemetery.

Saturday, August 18.—It is always a matter of regret when we find that somewhere in this magazine we have failed to give credit to all the designers to whom credit is due. As an instance, we find that in publishing some illustrations from the Architectural League Exhibition in the July number, we printed a small illustration of the house of Donald D. Dodge at Rockport, Me. We credited Tilden, Register & Pepper as the architects, but did not then know that Robert Wheelwright, landscape architect of Philadelphia, was responsible for the unusually attractive setting.

Usually through haste or carelessness, a member of one of the professions, sending us a photograph of work in which he was engaged, fails to mention the fact that members of another profession were likewise engaged, and, in accordance with our earnest endeavors, should be given credit.

Monday, August 20.—The Historic American Buildings Survey, which grew up like a mushroom as a measure of relief, has been reorganized as a permanent institution. Hereafter the job is shared jointly by the National Park Service, the Library of Congress, and the A. I. A. In the Library of Congress, under Dr. Leicester B. Holland's care, there are now 5,739 drawings and 3,474 photographs covering 2,315 projects.

At last, then, it seems that we have a permanently organized method of recording historic structures, where the records will always be available to those who are interested. It should be a stimulation to local organizations to know this fact, and it will perhaps spur them on to the completion of work already undertaken in the measurement of buildings worth recording which may not be with us tomorrow.

Tuesday, August 21.—The Federal policy of designing in Washington its own post-offices and other public buildings still remains the chief topic of conversation wherever architects gather. Today at lunch at the League one architect, whose taste is impeccable, said that he had taken the article we published in the June issue showing recent government buildings throughout the United States, had covered up all credit lines, and had then proceeded to grade the various buildings from A to F, judging necessarily on their exterior appearance only. It was found, when all had been classified, that the buildings designed by the Treasury Department had a higher rating than those designed by private architects. On the other hand, there were no A ratings in the Treasury Department's work, nor any F's. In a word, the government-designed architecture maintained a higher, if not an especially brilliant, standard.

All of which leads to the conclusion that the Secretary of the Treasury could perhaps justify, esthetically, his recent ruling.

Wednesday, August 22.—There is decided encouragement in the personnel that has been selected by the Administrator, James A. Moffett, to assist him in carrying out the provisions of the National Housing Act. We can judge best by the type of men selected for the technical divisions, and find real assurance in seeing therein the names of Henry Klaber, F. Leo Smith, Wharton Clay, J. D. Dusenberry, Miles Colean, and James Taylor.

Friday, August 24.—Columbia University is going right ahead with its program of broadening its architectural courses. Jan Ruhtenberg has been added to the faculty. Although of Swedish parentage, Ruhtenberg was born in Riga, Germany, in 1899, and has practised during most of his life in Berlin, associated with Mies van der Rohe.

Monday, August 27.—And still the architects' luncheon tables buzz with the discussion as to whether or not the government should do its own architectural designing. Today at the League a group concentrated on the question of costs. Unfortunately, there has never been any real attempt at a case history by either the Treasury Department or the private architect—at least no such specific records have been made public. Many architects feel that the private practitioner, in his knowledge of local conditions and materials, his small organization with its consequent low overhead, is able unquestionably to produce a set of working drawings for a post-office, let us say, at less actual cost than that for which the Supervising Architect's office could make them. The Supervising Architect's office being large, perhaps not being charged with rent, telephone service, light, heat, and other items of overhead, has no means of figuring what its costs of production are. One architect present, who had conducted an office having from three to three hundred men in it, said he was convinced that the big office cannot possibly compete with the small office in production costs.

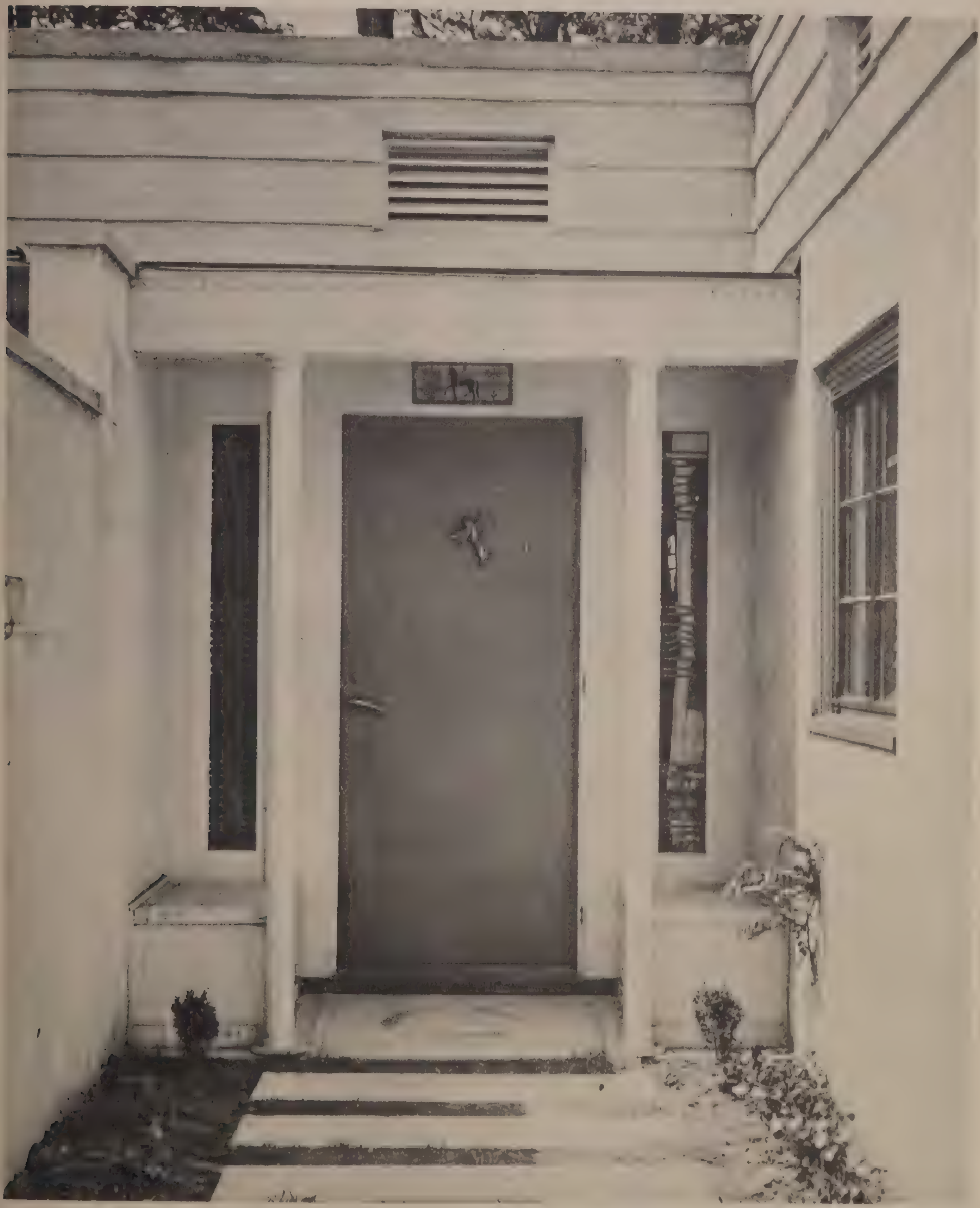
Of course, on the other hand, the Supervising Architect's office has in its possession all the technical information regarding post-office construction that the private practitioner has to dig up for himself. It would seem reasonable to conclude that an ideal combination—from the point of view of getting the best buildings for the government, would be to utilize the technical knowledge of the Supervising Architect's office together with the local architect's knowledge of local conditions and materials. Just how this could best be done is another problem. Secretary Morgenthau evidently thinks it can be done by bringing the private practitioner to Washington and putting him to work at a salary of $25 a day for the limited time required for him to design a particular building. How many architects are likely to be able to afford the giving up of what opportunities, meager as they are, are found at home, leaving family and closing the local office to go to Washington at $25 a day?

Wednesday, August 29.—President Russell of the Institute seems to have thought that the Treasury Department would not succeed in bringing independent architects to Washington to work on a salary basis, in accordance with the new policy. They seem to be going down there, however. Thomas Ellett is on the job; W. D. Foster tells me that he is leaving in a day or so to design a group of post-office substations for New York City; and Lorimer Rich is to do the same for Brooklyn.

Thursday, August 30.—While we talk about housing, the British government goes ahead and builds it. They have recently published a preliminary program, planning housing activities for four years over the whole of England. Altogether, 267,000 old houses are to be pulled down, and 285,000 new ones built, housing 1,240,000 people under normal and hygienic conditions. By 1938, if the plans are carried out, seven times as many occupants of slums will have been put into new dwellings as during the last fifty years. The cost is estimated at £115,000,000, and it will give direct employment to 110,000 with an indirect effect of far greater extent.

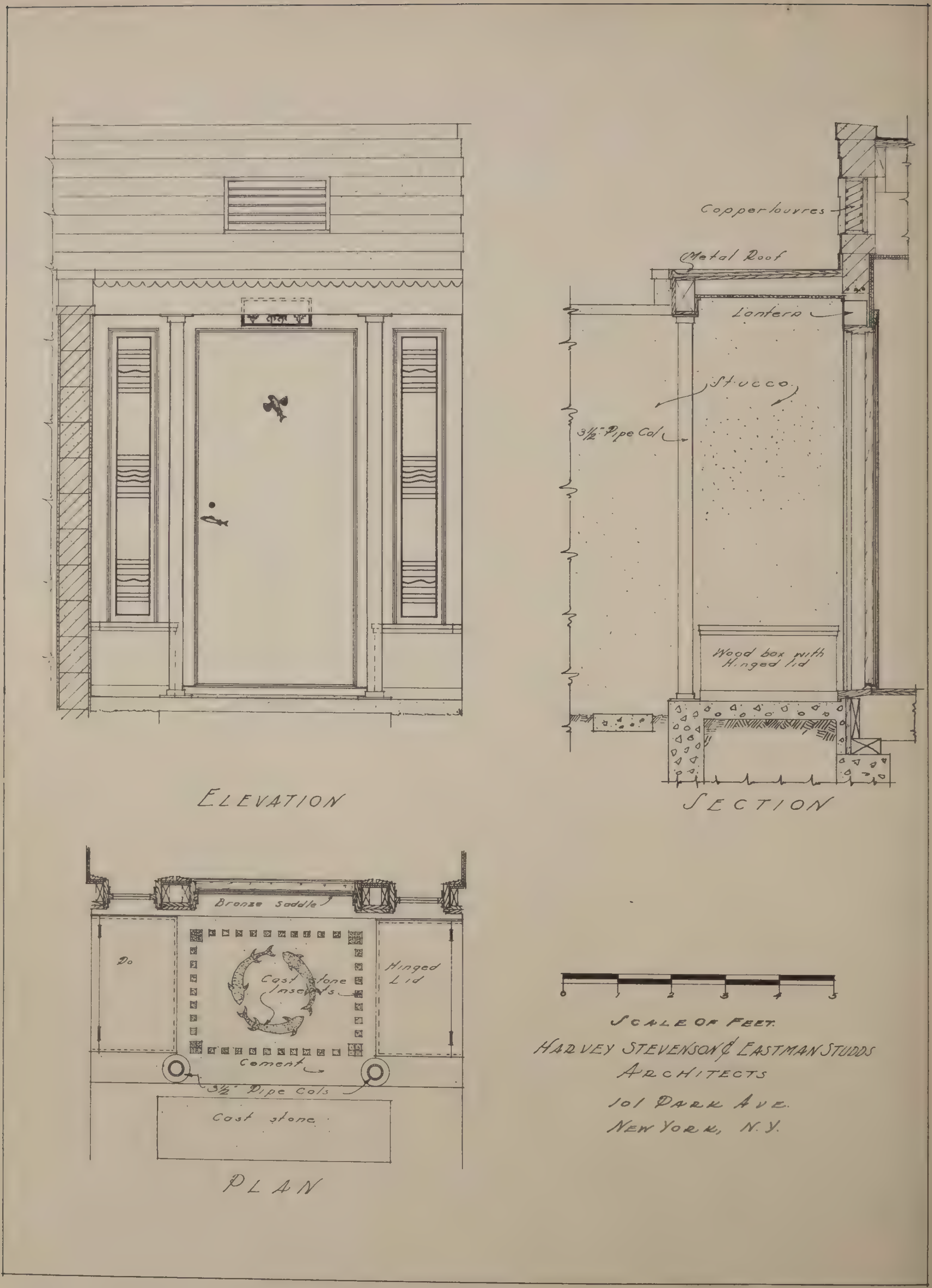
Friday, August 31.—It does seem that with credit as plentiful as it has been made, it should be possible to borrow money at decidedly less cost. Any commodity, when freely produced and freely offered, lowers in price—except money. We have been told that the National Housing Act offers a particularly attractive arrangement in the borrowing of small amounts for repairs and rehabilitation. Nevertheless, if one takes the thing apart and looks at the wheels, it becomes evident that in borrowing from the bank on this basis one is paying somewhat over 9 per cent for the use of the money.

FAVORITE FEATURES



Many of the architect's creations fail to measure up to his expectations. Here is one of a series, however, that satisfy, in a measure, the designers themselves
(*Scale details overleaf*)

Entrance doorway, House of Byron Dexter
Croton-on-Hudson, N. Y.
HARVEY STEVENSON & EASTMAN STUDDS
ARCHITECTS



Entrance doorway, House of Byron Dexter, Croton-on-Hudson, N. Y.
Harvey Stevenson & Eastman Studds, architects

THE NINETY-SIXTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS
ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF BUSINESS BUILDING LOBBIES

Subjects of previous portfolios are listed below at left and right of page

1926
- DORMER WINDOWS
- SHUTTERS AND BLINDS

1927
- ENGLISH PANELLING
- GEORGIAN STAIRWAYS
- STONE MASONRY TEXTURES
- ENGLISH CHIMNEYS
- FANLIGHTS AND OVERDOORS
- TEXTURES OF BRICKWORK
- IRON RAILINGS
- DOOR HARDWARE
- PALLADIAN MOTIVES
- GABLE ENDS
- COLONIAL TOP-RAILINGS
- CIRCULAR AND OVAL WINDOWS

1928
- BUILT-IN BOOKCASES
- CHIMNEY TOPS
- DOOR HOODS
- BAY WINDOWS
- CUPOLAS
- GARDEN GATES
- STAIR ENDS
- BALCONIES
- GARDEN WALLS
- ARCADES
- PLASTER CEILINGS
- CORNICES OF WOOD

1929
- DOORWAY LIGHTING
- ENGLISH FIREPLACES
- GATE-POST TOPS
- GARDEN STEPS
- RAIN LEADER HEADS
- GARDEN POOLS
- QUOINS
- INTERIOR PAVING
- BELT COURSES
- KEYSTONES
- AIDS TO FENESTRATION
- BALUSTRADES

1930
- SPANDRELS
- CHANCEL FURNITURE
- BUSINESS BUILDING ENTRANCES
- GARDEN SHELTERS
- ELEVATOR DOORS
- ENTRANCE PORCHES
- PATIOS
- TREILLAGE
- FLAGPOLE HOLDERS

Below are the subjects of forthcoming Portfolios

Roof Trusses
NOVEMBER

Modern Lighting Fixtures
DECEMBER

Circular Gothic Windows
JANUARY

Tile Roofs
FEBRUARY

Molded Brick
MARCH

Dormer Windows
APRIL

Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.

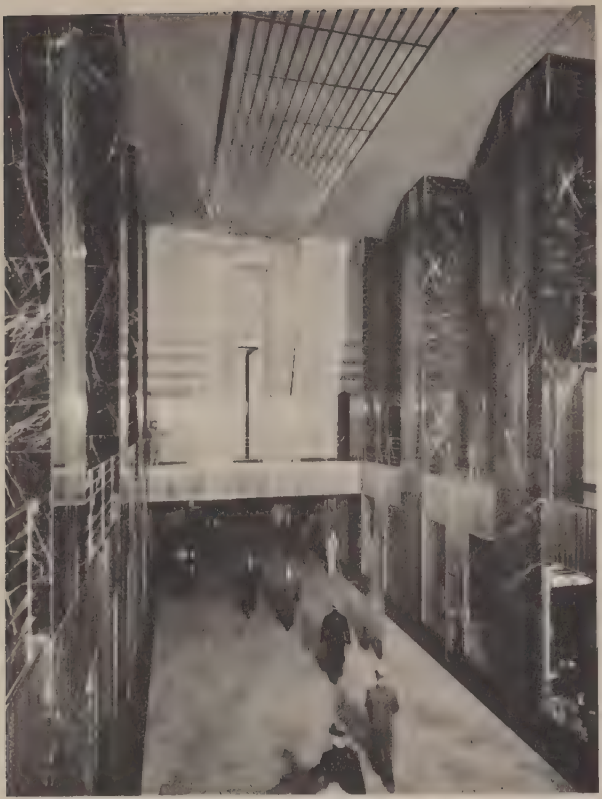
1930
- CASEMENT WINDOWS
- FENCES OF WOOD
- GOTHIC DOORWAYS

1931
- BANKING-ROOM CHECK DESKS
- SECOND-STORY PORCHES
- TOWER CLOCKS
- ALTARS
- GARAGE DOORS
- MAIL-CHUTE BOXES
- WEATHER-VANES
- BANK ENTRANCES
- URNS
- WINDOW GRILLES
- CHINA CUPBOARDS
- PARAPETS

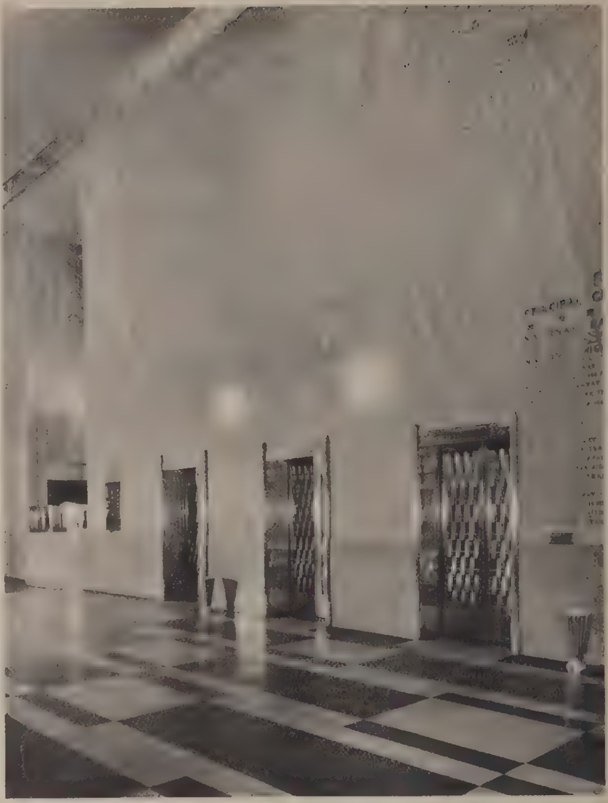
1932
- RADIATOR ENCLOSURES
- INTERIOR CLOCKS
- OUTSIDE STAIRWAYS
- LEADED GLASS MEDALLIONS
- EXTERIOR DOORS OF WOOD
- METAL FENCES
- HANGING SIGNS
- WOOD CEILINGS
- MARQUISES
- WALL SHEATHING
- FRENCH STONEWORK
- OVER-MANTEL TREATMENTS

1933
- BANK SCREENS
- INTERIOR DOORS
- METAL STAIR RAILINGS
- VERANDAS
- THE EAGLE IN SCULPTURE
- EAVES RETURNS ON MASONRY
- GABLES
- EXTERIOR LETTERING
- ENTRANCE DRIVEWAYS
- CORBELS
- PEW ENDS
- GOTHIC NICHES
- CURTAIN TREATMENT AT WINDOWS

1934
- EXTERIOR PLASTERWORK
- CHURCH DOORS
- FOUNTAINS
- MODERN ORNAMENT
- RUSTICATION
- ORGAN CASES
- GARDEN FURNITURE
- WINDOW HEADS, EXTERIOR
- SPIRES

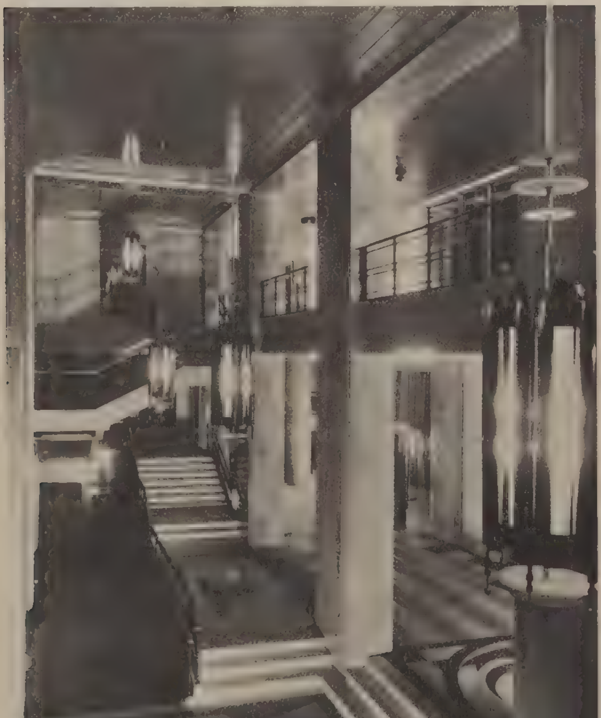


Board of Trade Building, Chicago
Holabird & Root

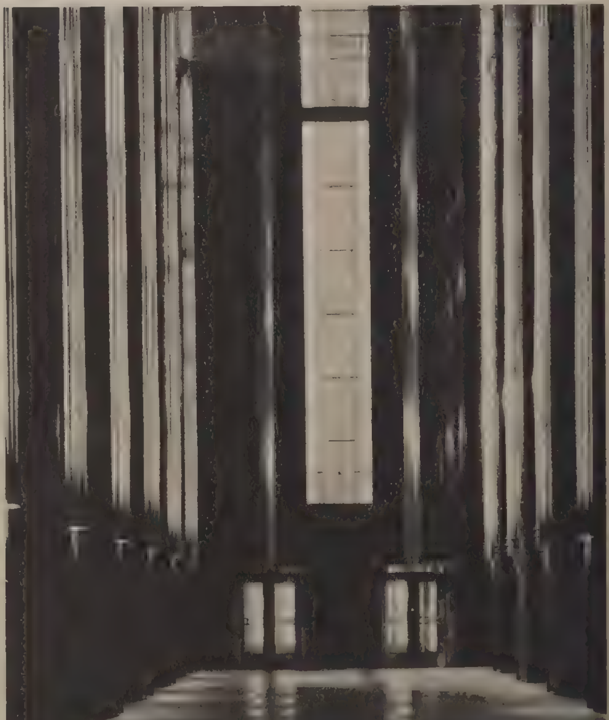


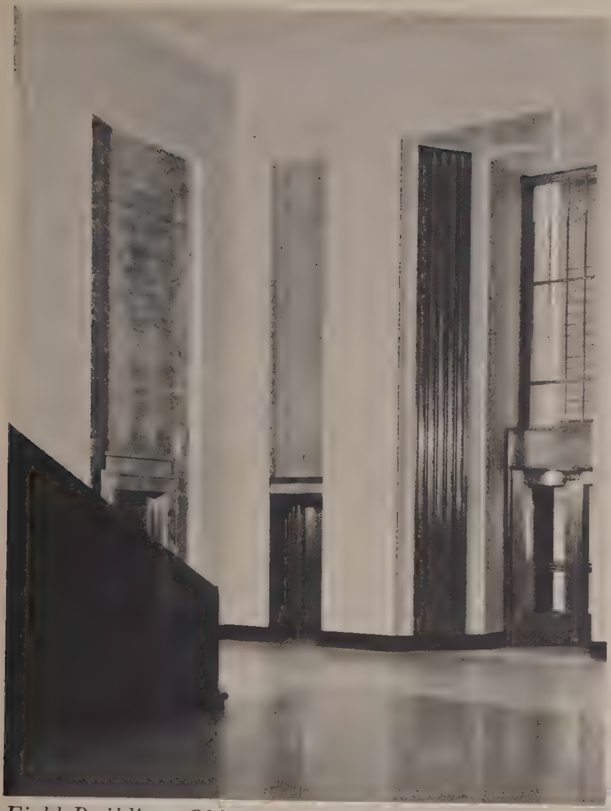
Chicago Motor Club, Chicago
Holabird & Root

Michigan Square Building, Chicago
Holabird & Root

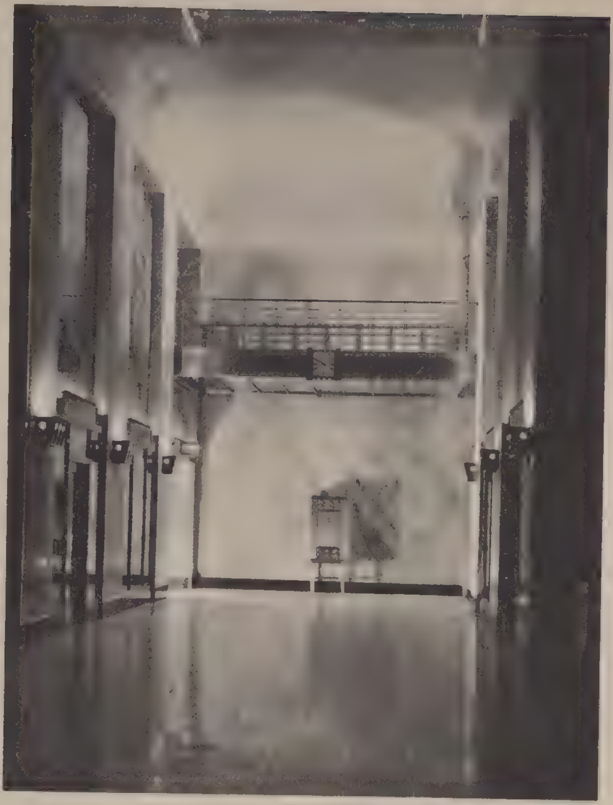


St. Paul (Minn.) Court House
Holabird & Root



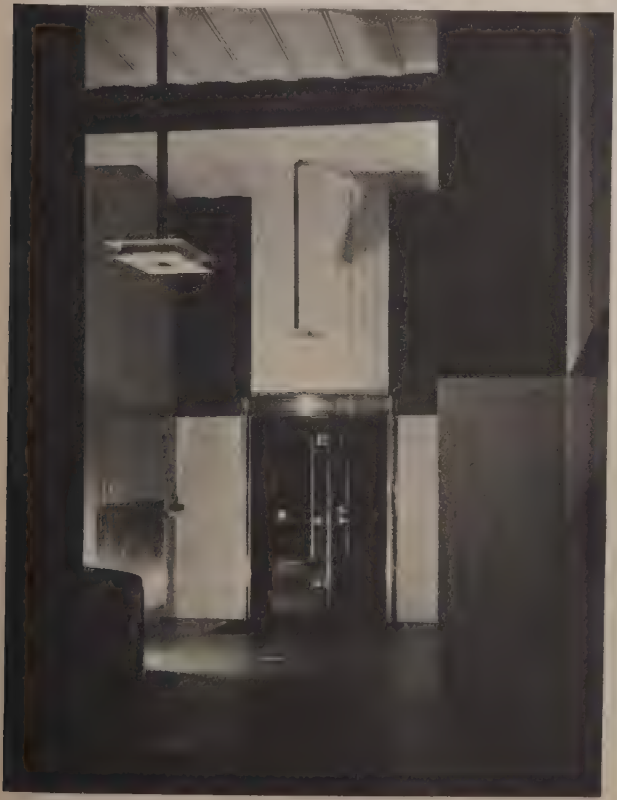


Field Building, Chicago
Graham, Anderson, Probst & White

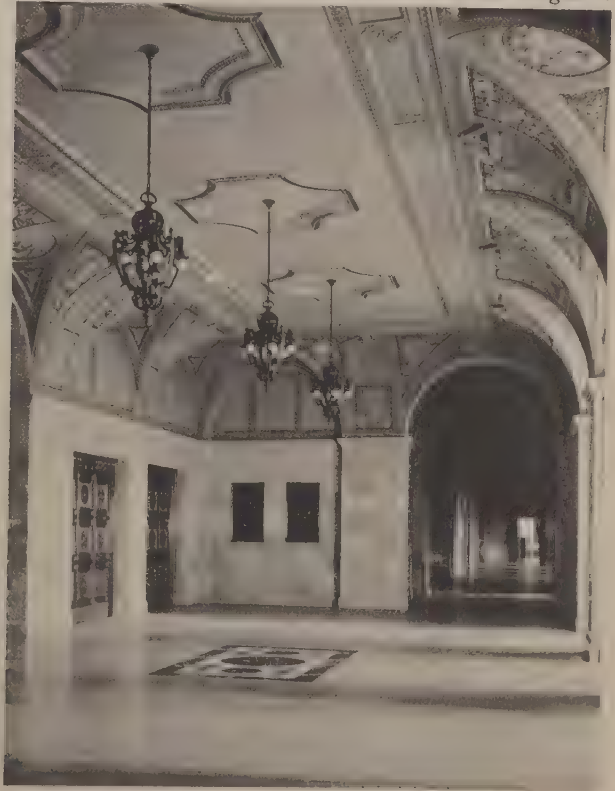


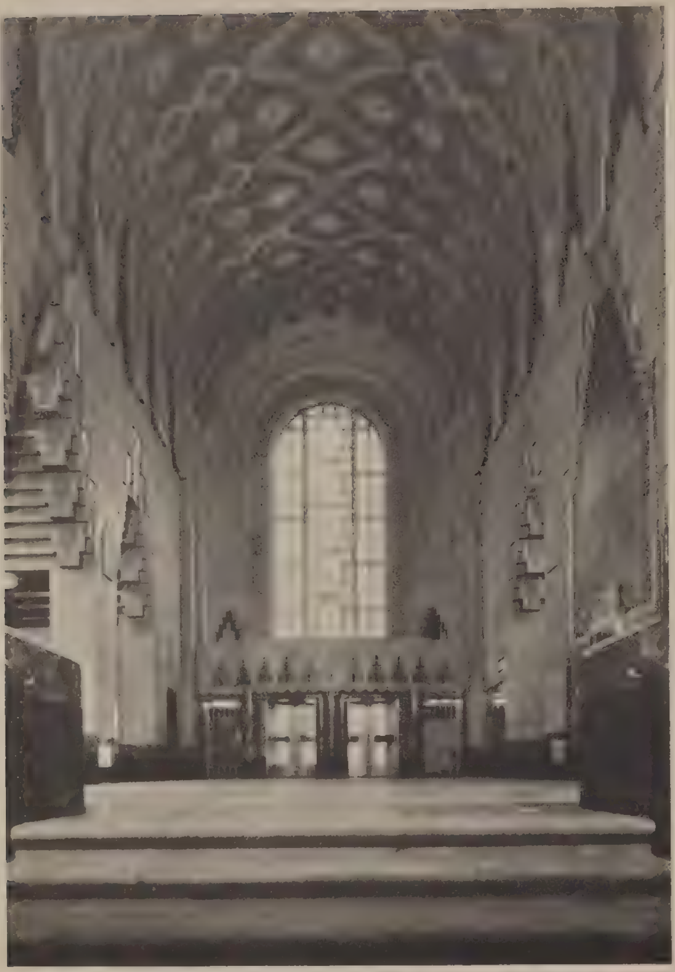
Field Building, Chicago
Graham, Anderson, Probst & White

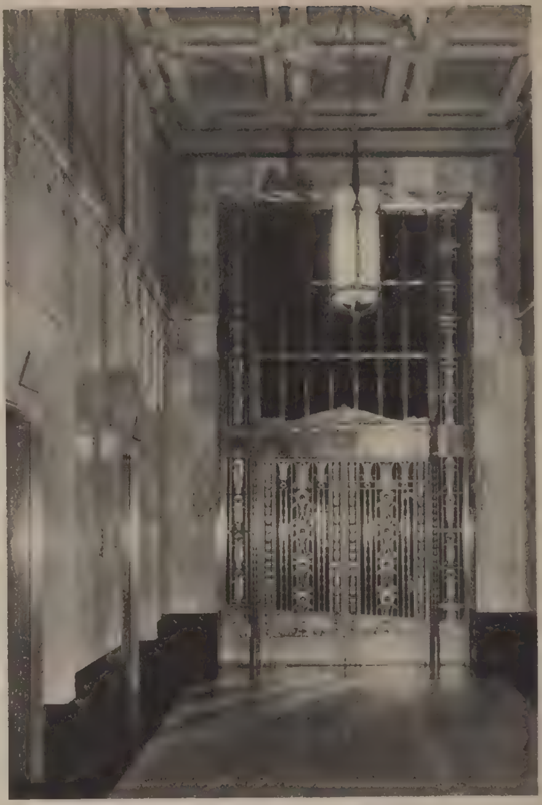
Interfraternity Club, Chicago
Holabird & Root



Provident Mutual Life Insurance Building,
Philadelphia
Cram & Ferguson

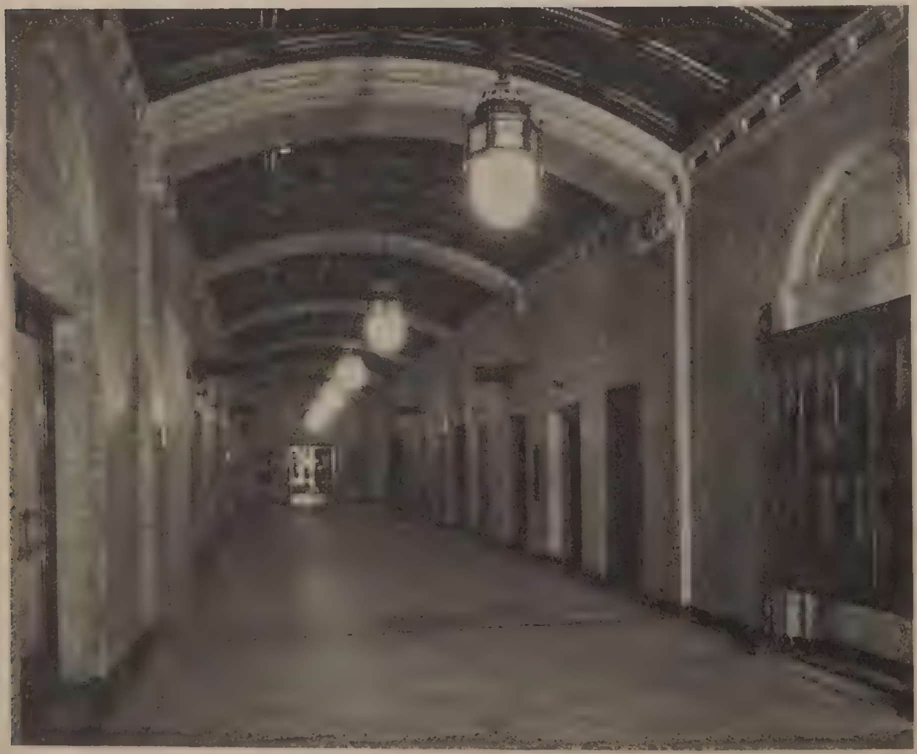




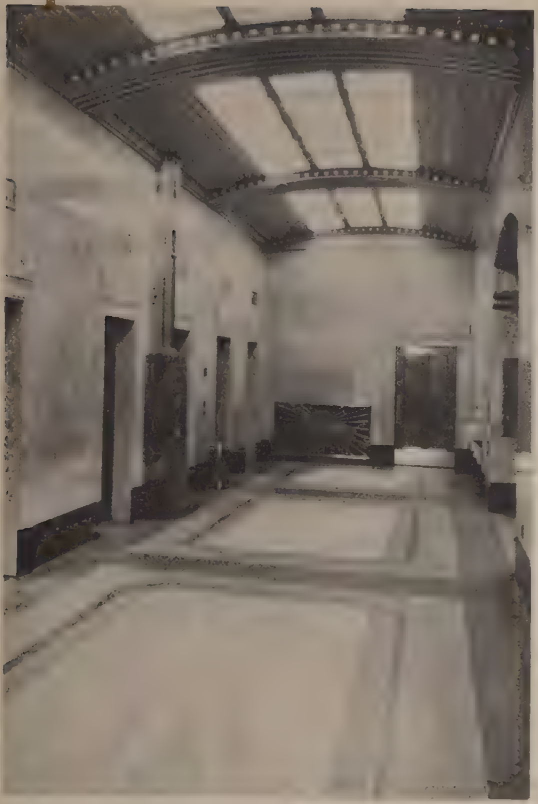


Fidelity Bank Building, Kansas City, Mo.
Hoit, Price & Barnes

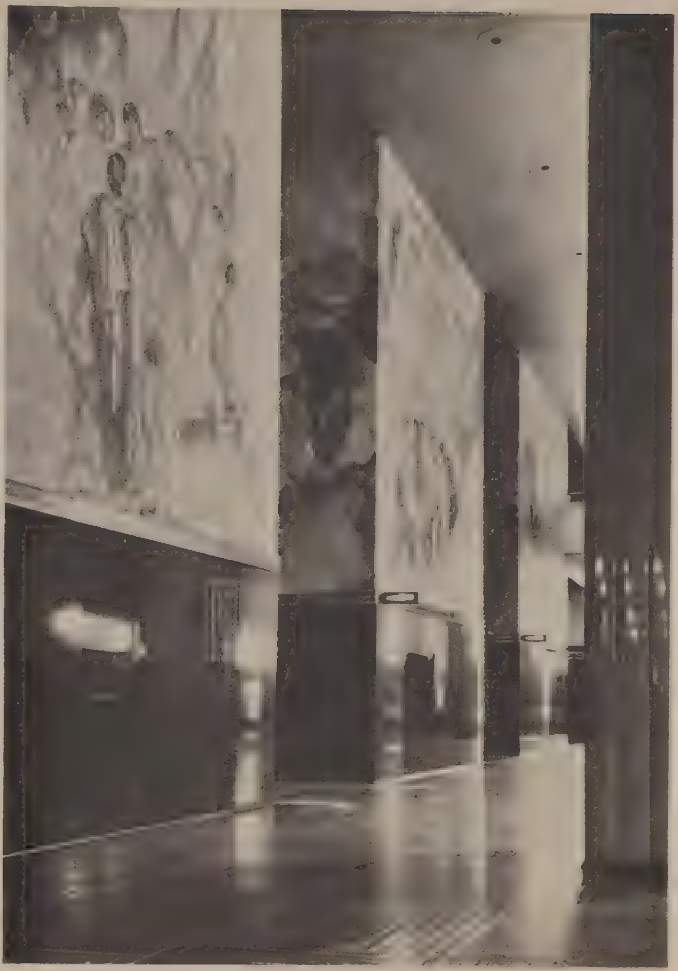
Union Trust Building, Detroit
Smith, Hinchman & Grylls



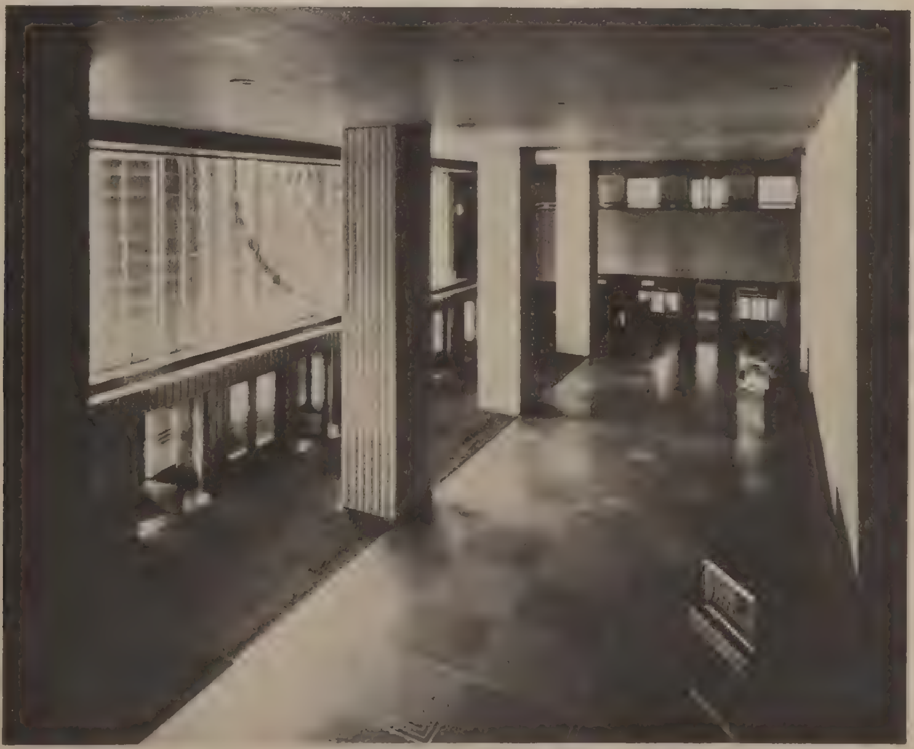
Buhl Building, Detroit
Smith, Hinchman & Grylls



Kansas City (Mo.) Power & Light Building
Hoit, Price & Barnes



R. C. A. Building, Rockefeller Center, New York City. Reinhard & Hofmeister; Corbett, Harrison & MacMurray; Hood & Fouilhoux



R. C. A. Building,
Rockefeller Center,
New York City
Reinhard & Hofmeister;
Corbett, Harrison & MacMurray;
Hood & Fouilhoux

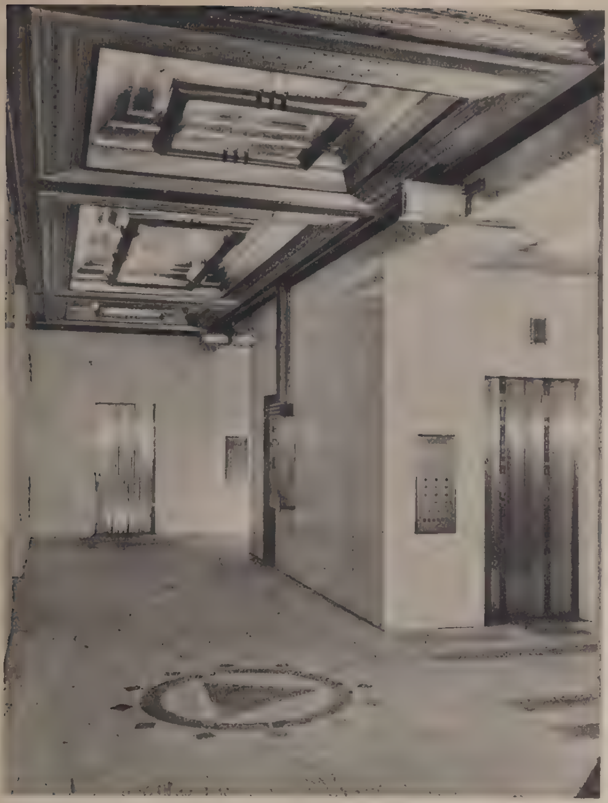
Holland Plaza Building, New York City

Building at Third Avenue and 44th Street
New York City

The Firm of Ely Jacques Kahn

Bricken Building, New York City

Bricken Building, New York City



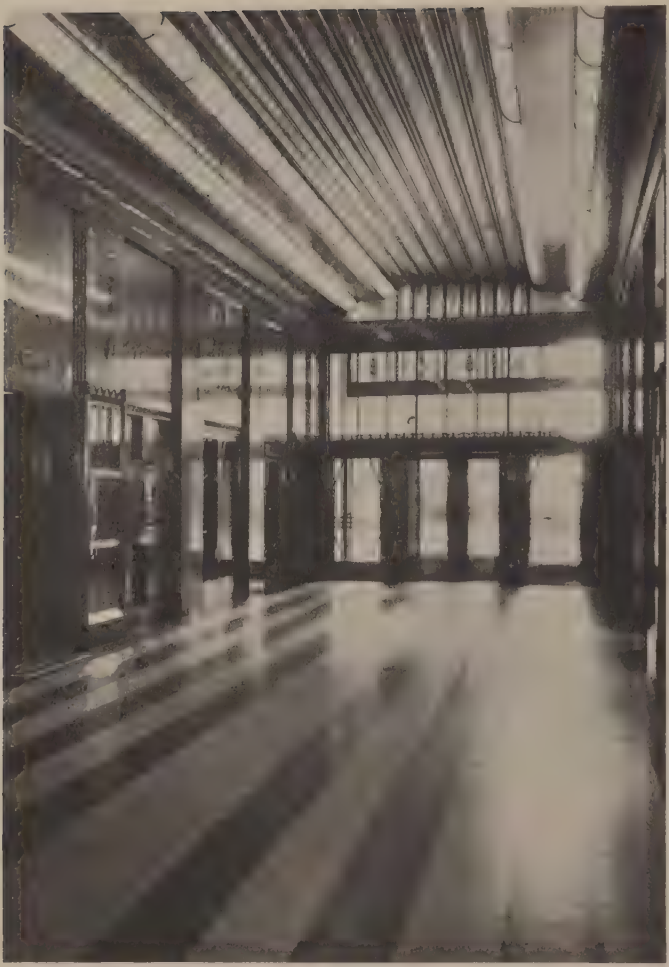
Building at Broadway and 41st Street, New York City

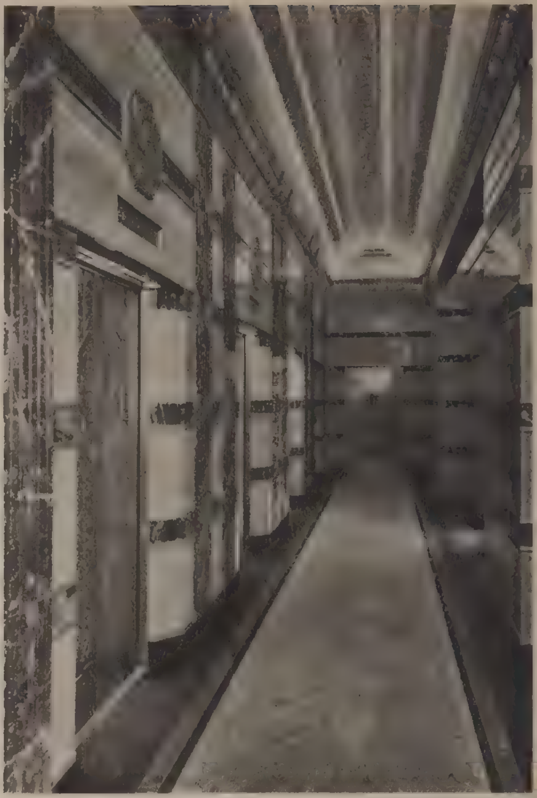
2 Park Avenue, New York City

The Firm of Ely Jacques Kahn

Squibb Building, New York City

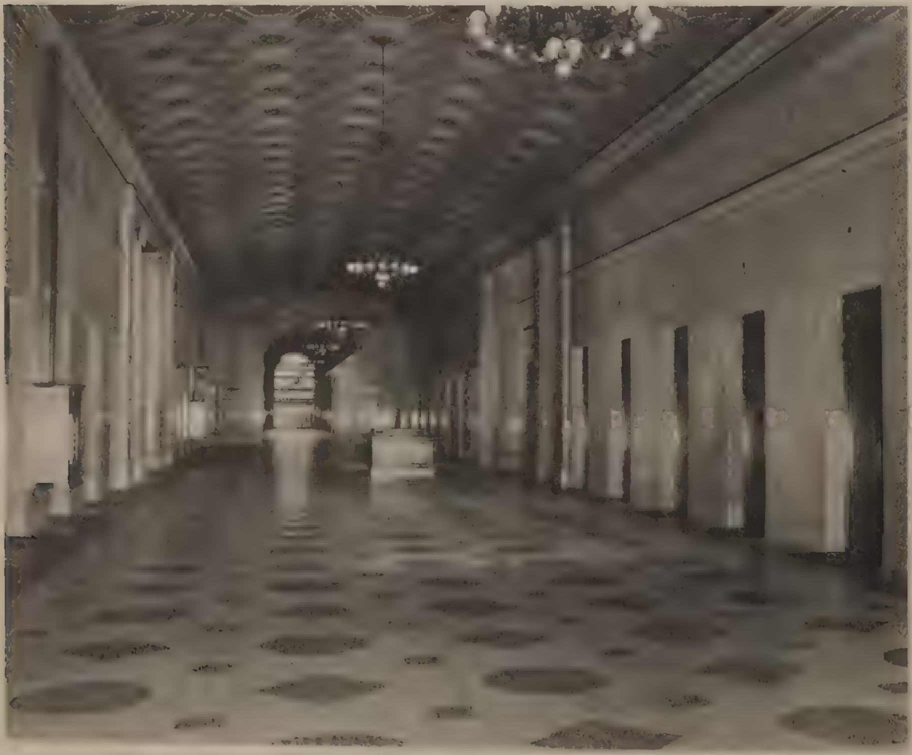
Squibb Building, New York City



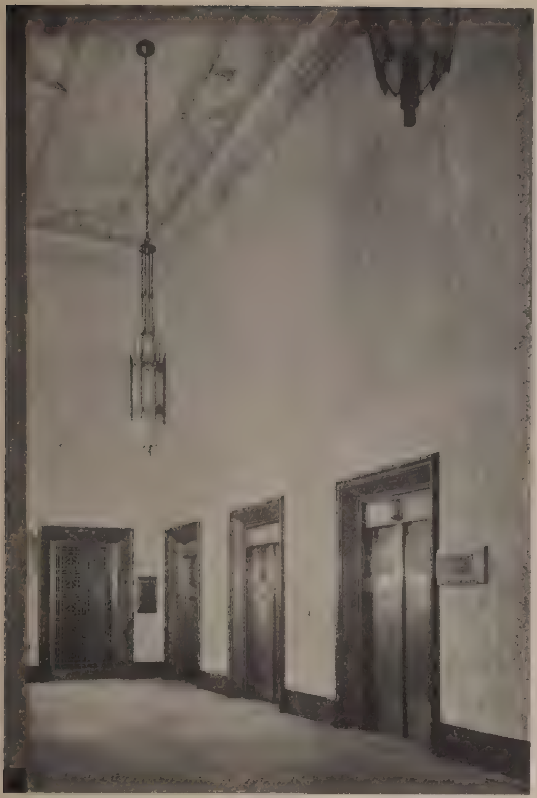


Goelet Building, New York City
E. H. Faile & Co.

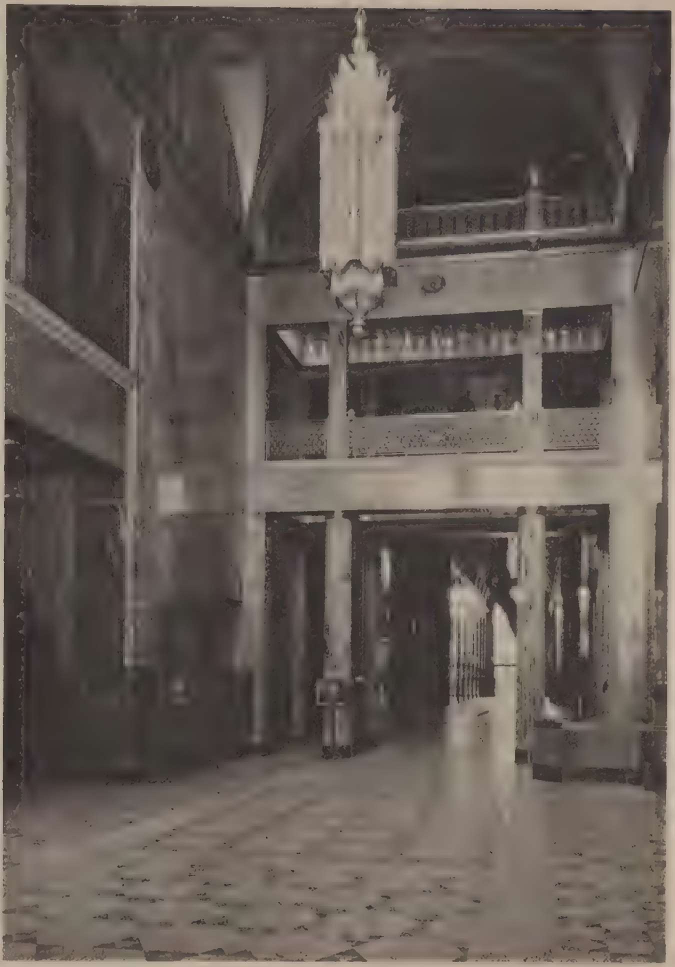
New Center Building, Detroit
Albert Kahn, Inc.



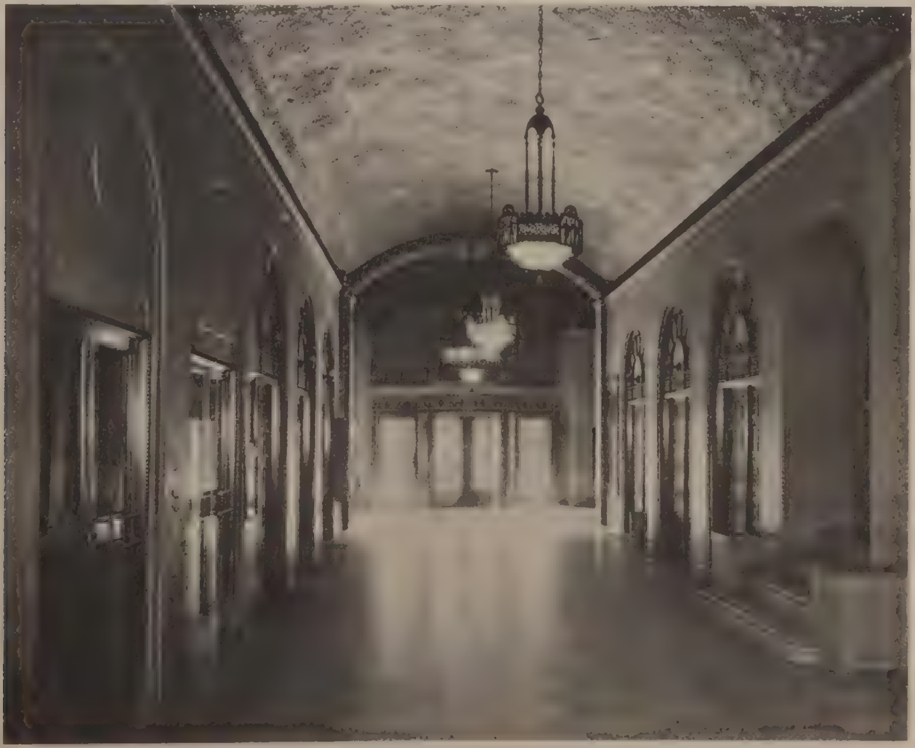
General Motors Building, Detroit
Albert Kahn, Inc.



American Bank and Trust Building,
New Orleans
Moise H. Goldstein



Fisher Building, Detroit
Albert Kahn, Inc.



Maccabees Building, Detroit
Albert Kahn, Inc.

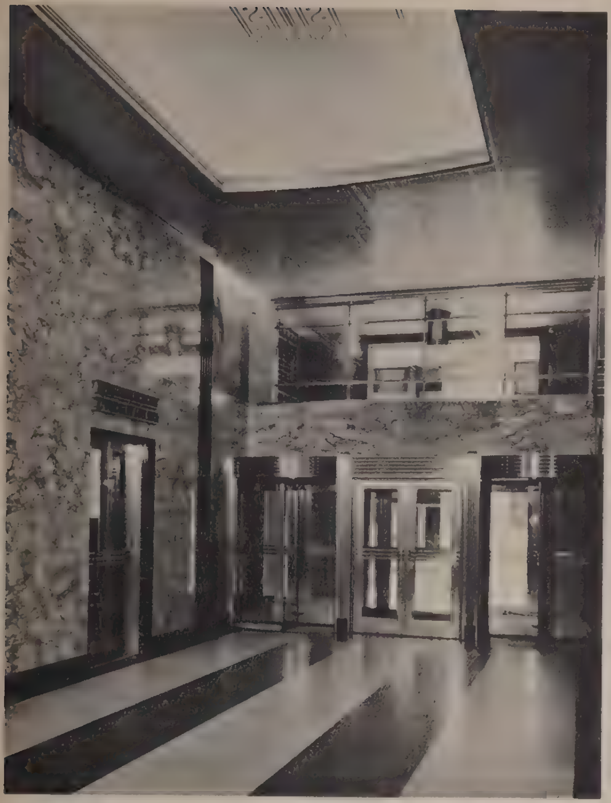
Lefcourt National Building, New York City

Insurance Company of North America Building, New York City

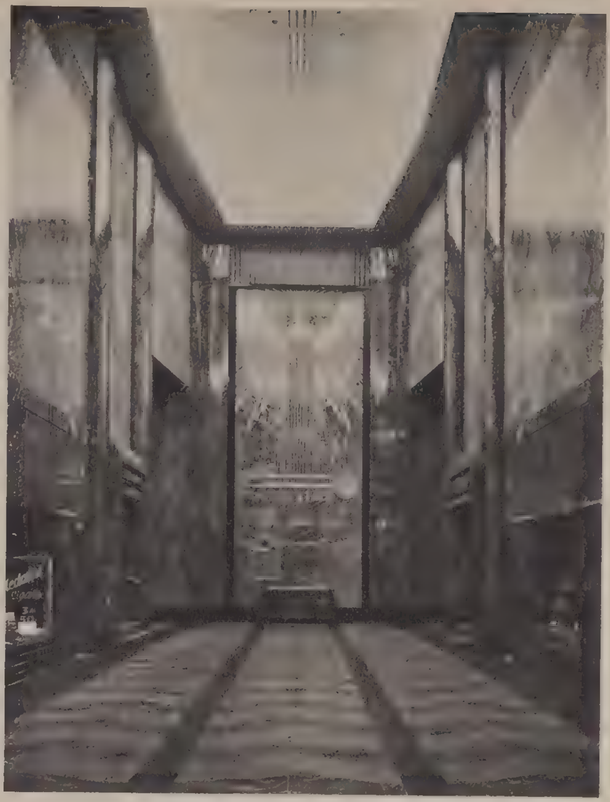
Shreve, Lamb & Harmon

Bankers Trust Company Building, New York City

Bankers Trust Company Building, New York City



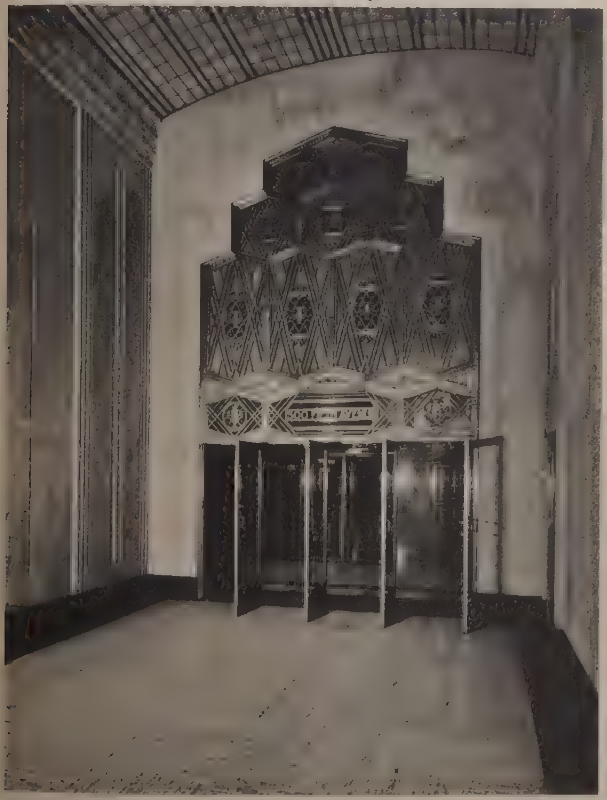
Insurance Company of North America Building, New York City



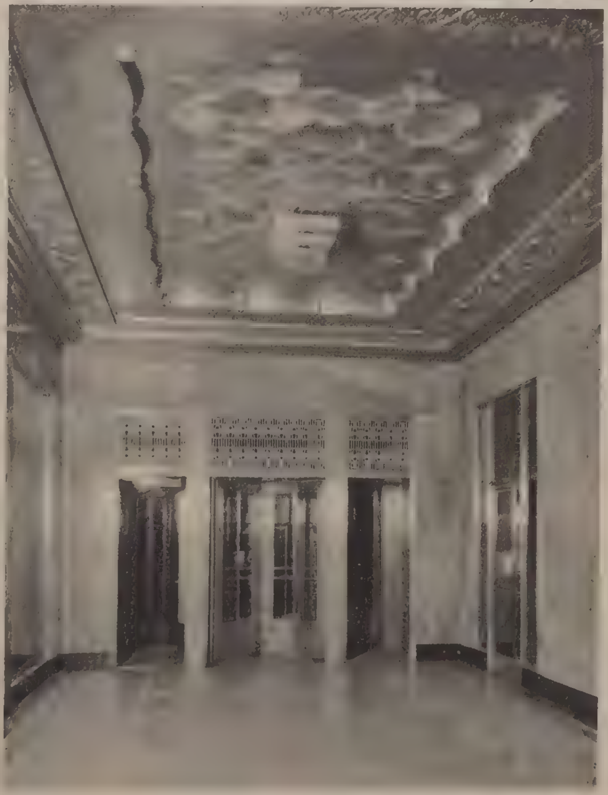
Empire State Building, New York City

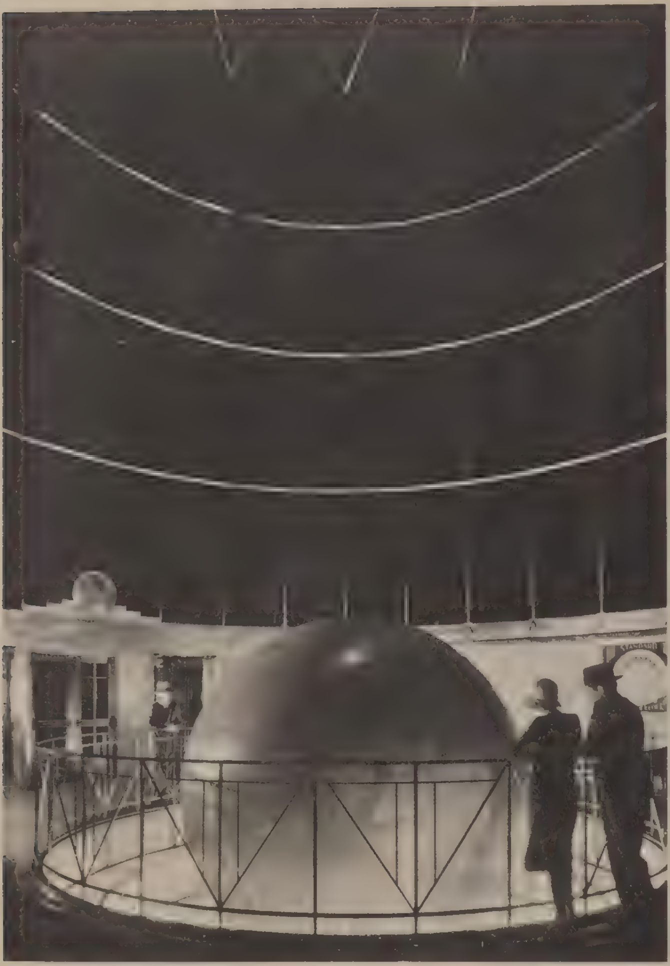
Shreve, Lamb & Harmon

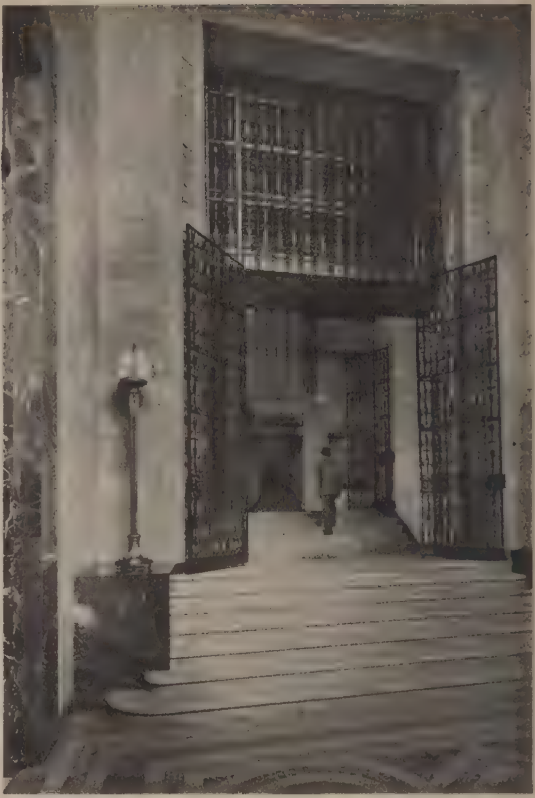
500 Fifth Avenue, New York City



R. J. Reynolds Tobacco Company, Winston-Salem, N. C.



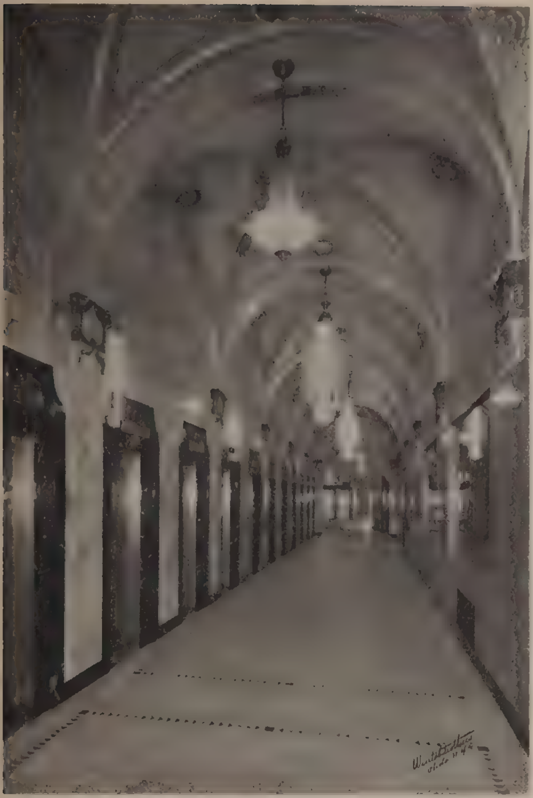




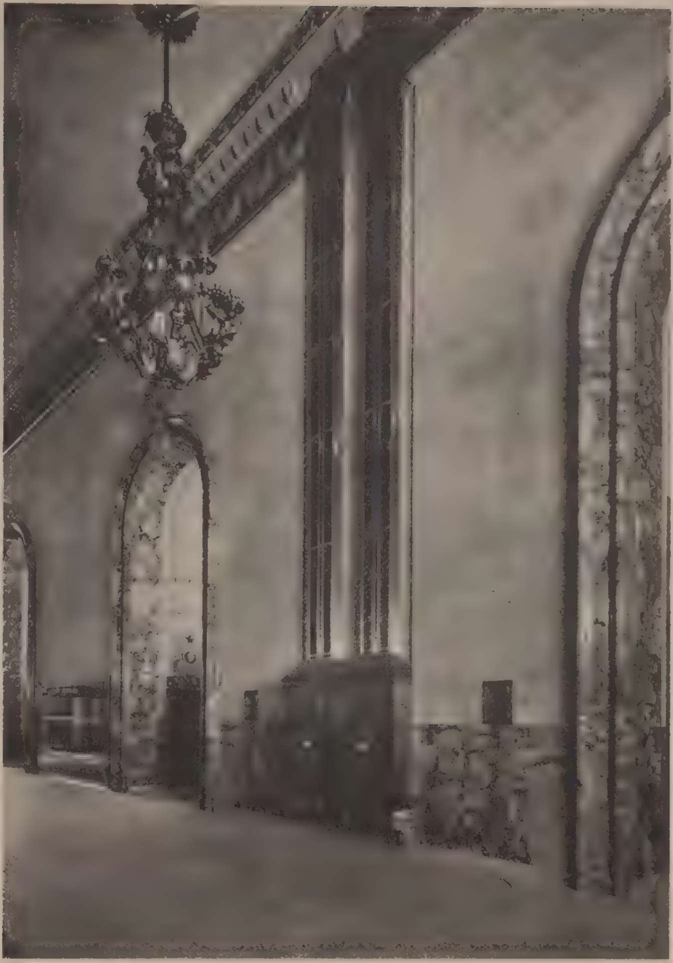
Baltimore Trust Building, Baltimore, Md.
Taylor & Fisher

Daily News Building
Raymond Hood, Godley and Fouilhoux

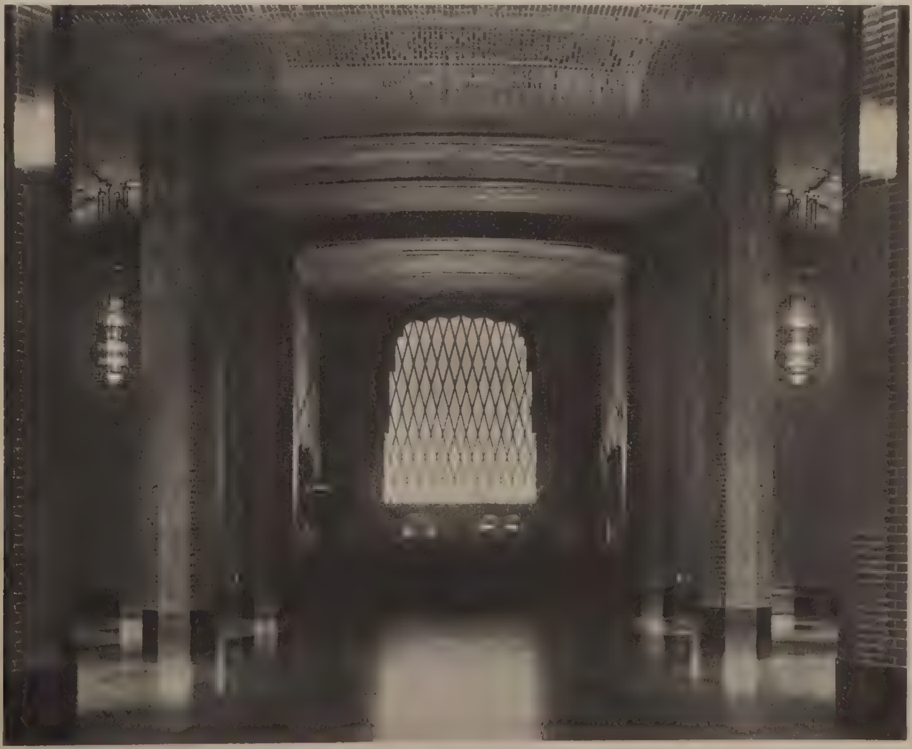
N. J. Bell Telephone Building, Newark, N. J.
Voorhees, Gmelin & Walker



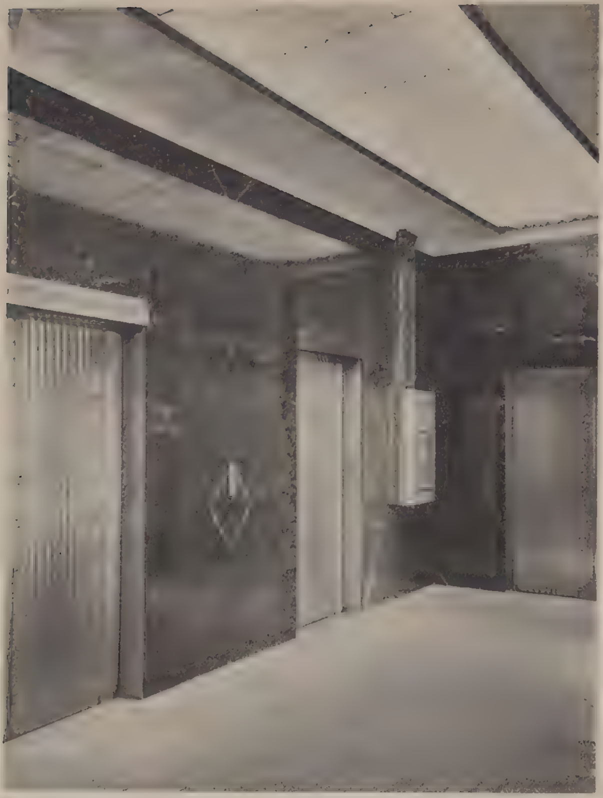
Harriman Building, New York City
Cross & Cross



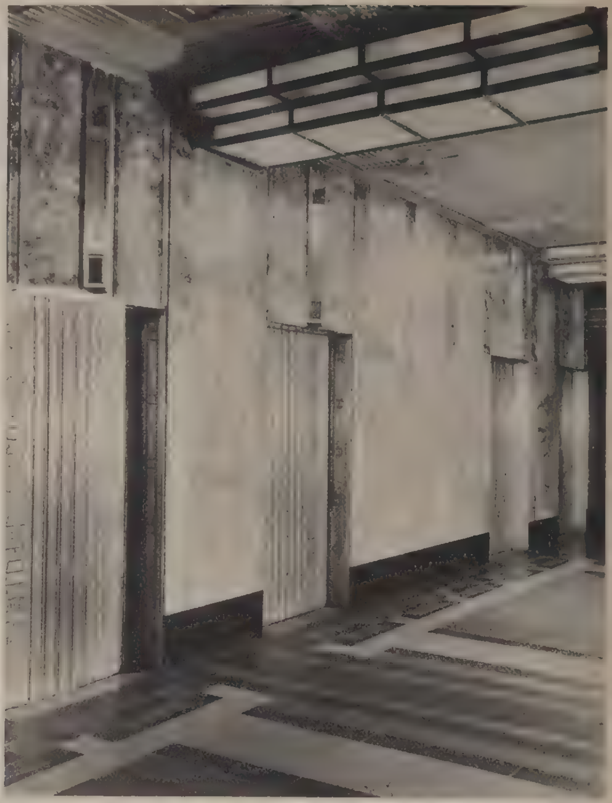
New York Central Building, New York City
Warren & Wetmore



Western Union Building,
New York City
Voorhees, Gmelin & Walker

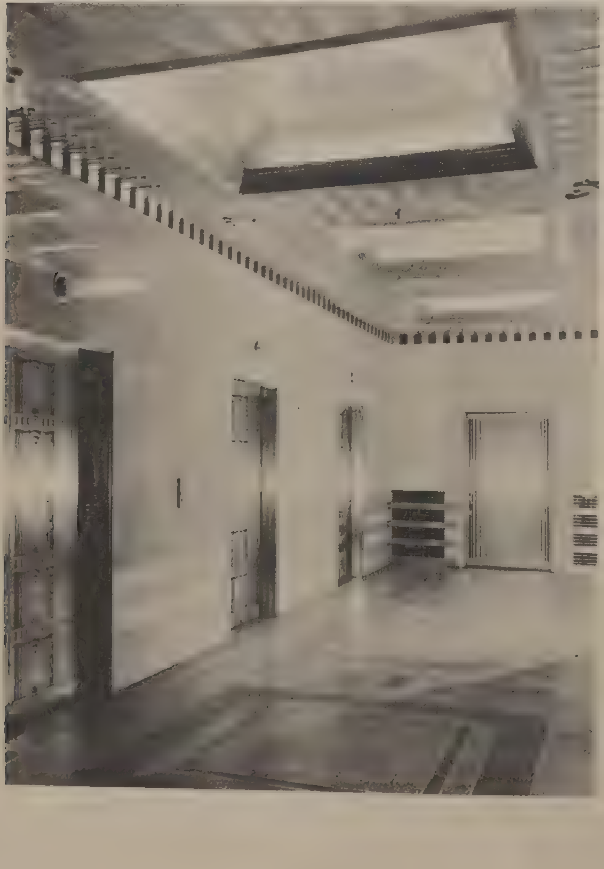


Building at Lexington Avenue and 57th Street, New York City
The Firm of Ely Jacques Kahn

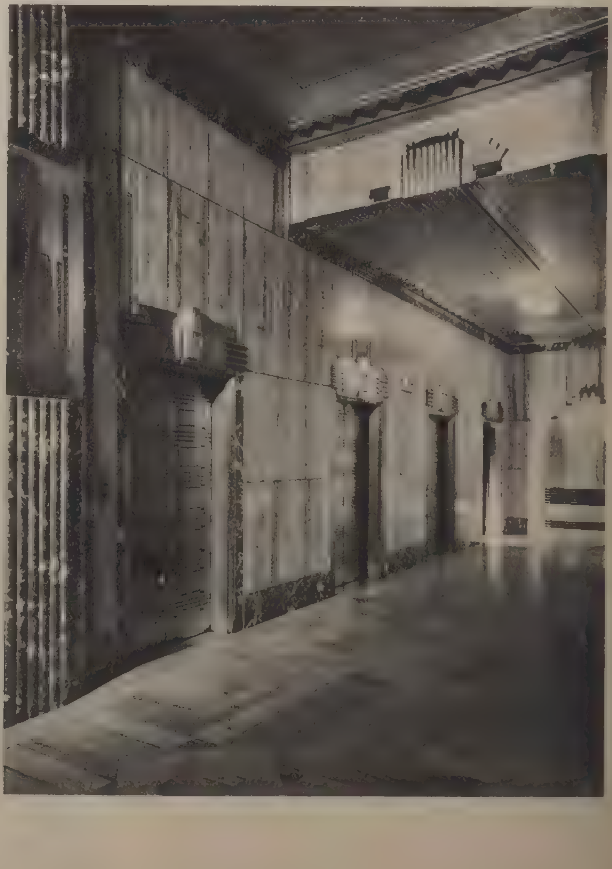


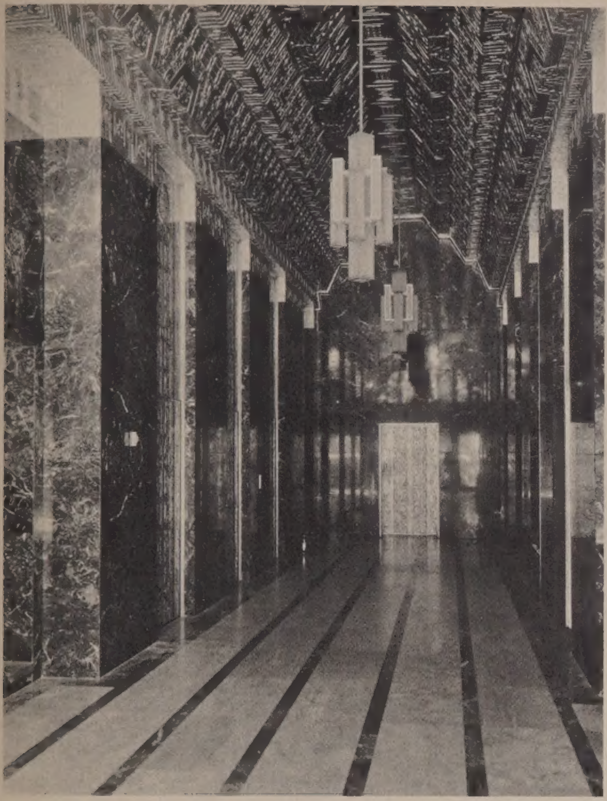
Building at Broadway and 38th Street, New York City
The Firm of Ely Jacques Kahn

Building at Broadway and 39th Street, New York City
The Firm of Ely Jacques Kahn

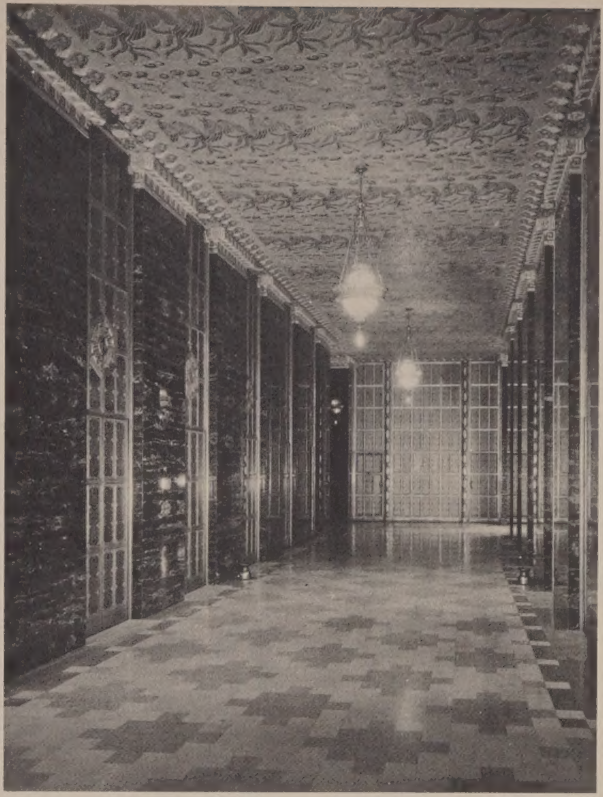


444 Madison Avenue, New York City
Robert D. Kohn; Charles Butler



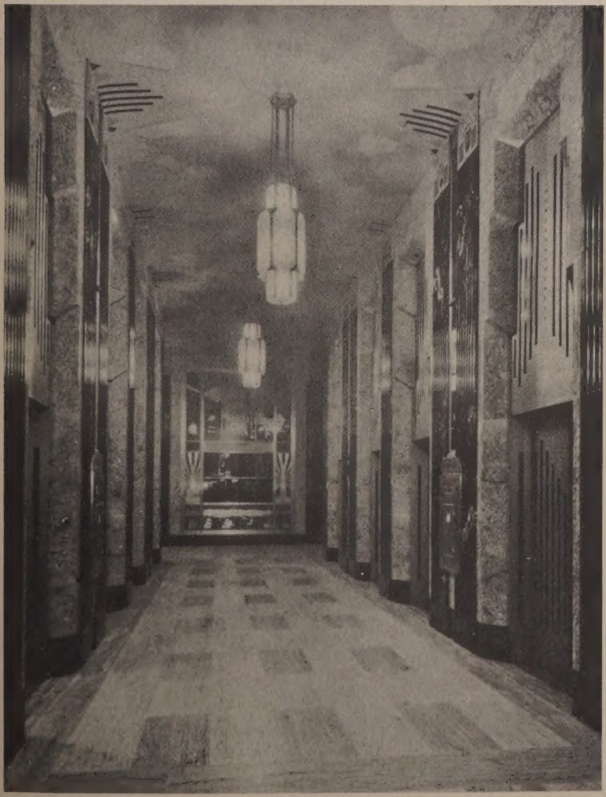


Four-Fifty Sutter, San Francisco
J. R. Miller and T. L. Pflueger

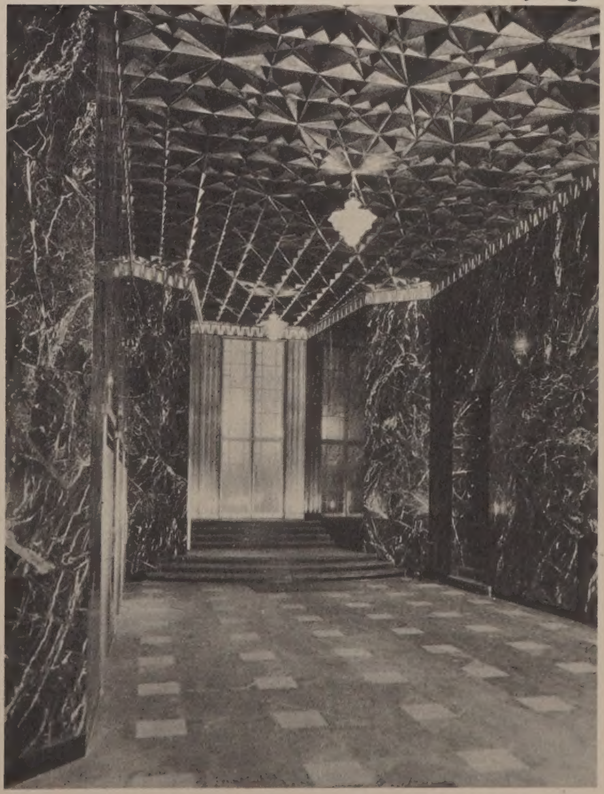


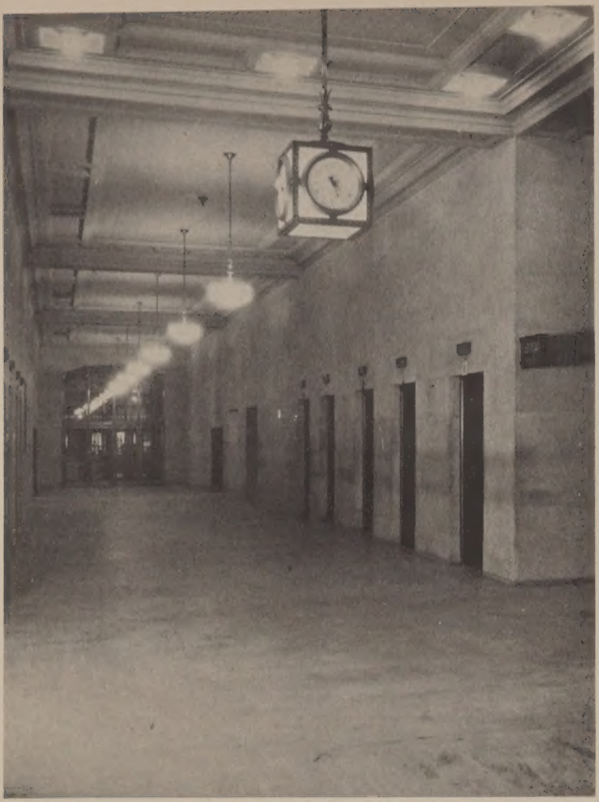
Telephone Building, San Francisco
J. R. Miller and T. L. Pflueger

75 Federal Street, Boston
Thomas M. James Company

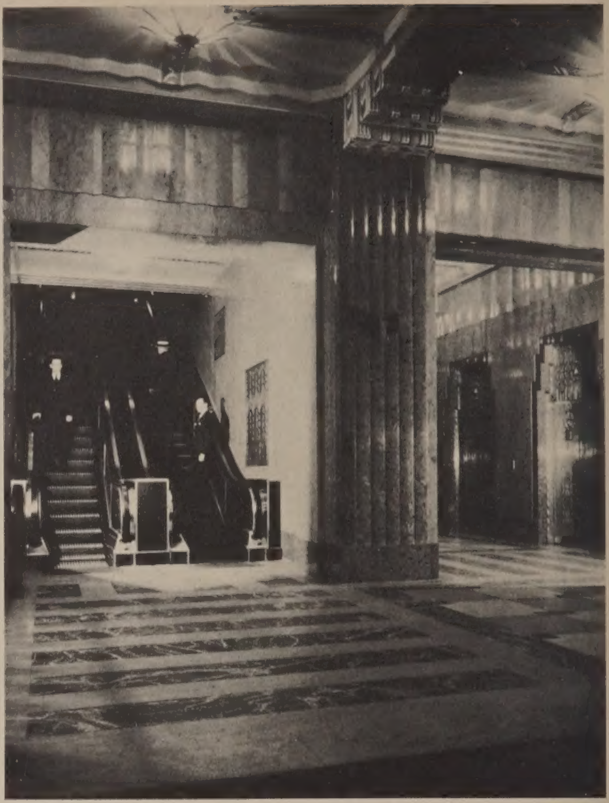


Stock Exchange Building, San Francisco
J. R. Miller and T. L. Pflueger



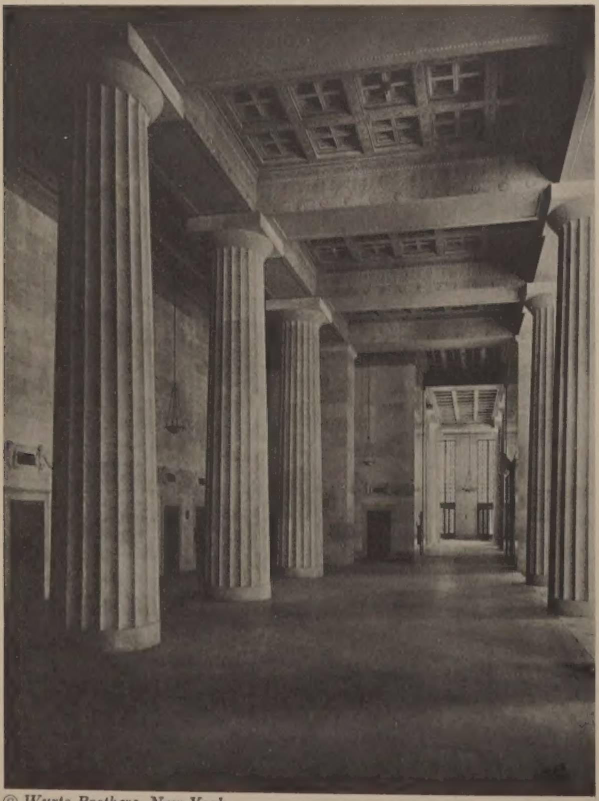


Prudential Building, Newark, N. J.
Cass Gilbert



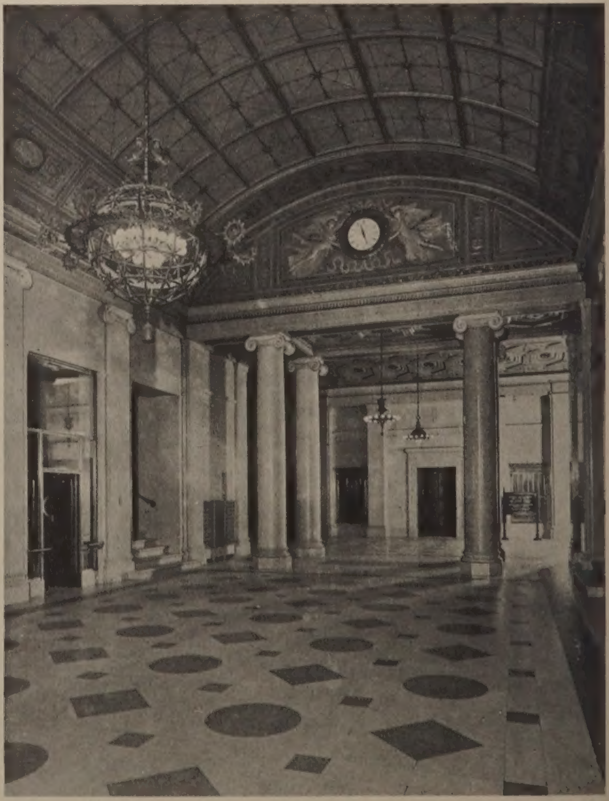
60 Wall Tower, New York City
Clinton & Russell and Holton & George

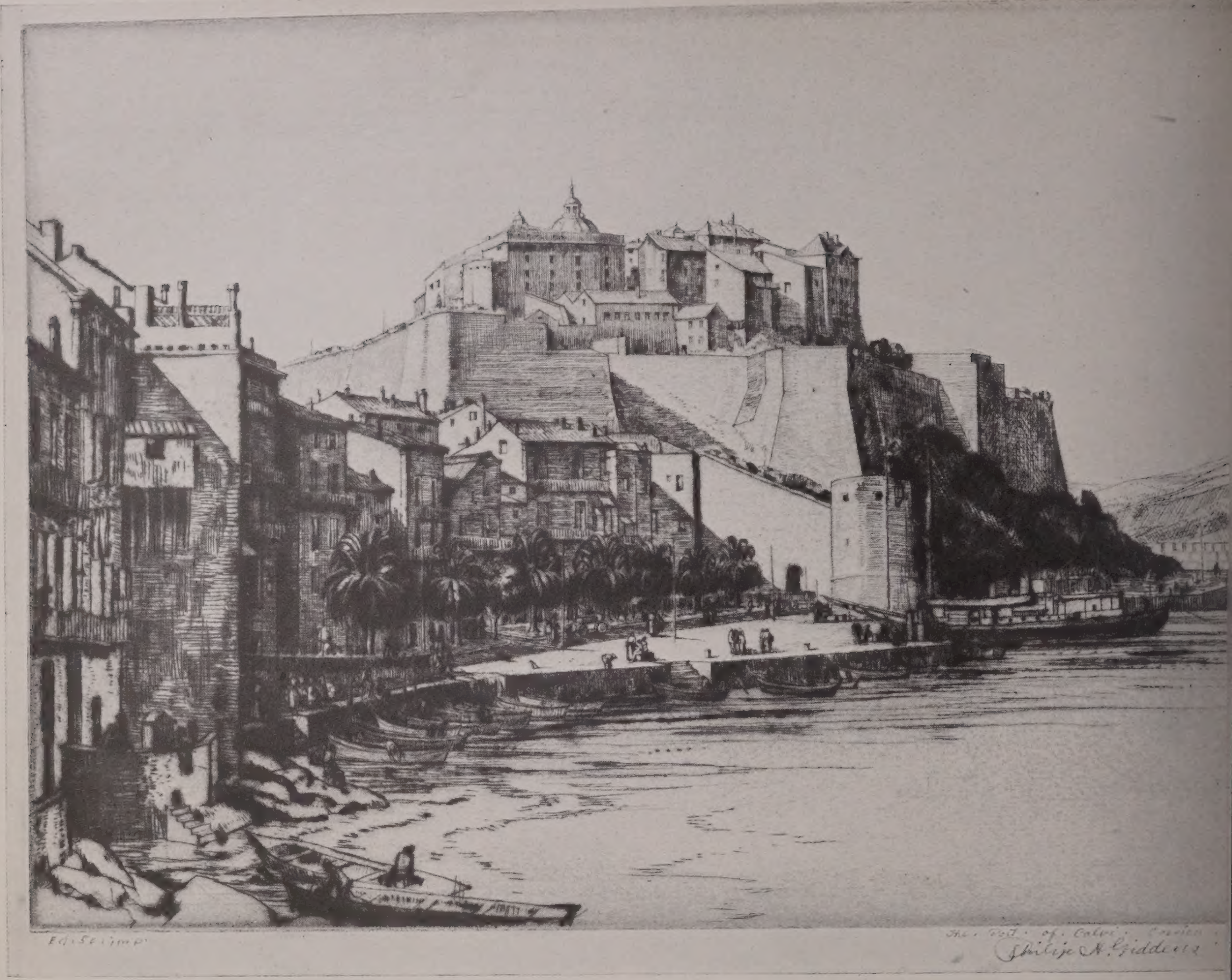
American Telephone & Telegraph Building,
New York City
W. W. Bosworth



© Wurts Brothers, New York

General Motors Building, Detroit
Albert Kahn, Inc.





THE PORT OF CALVI, CORSICA
From the dry-point etching by
PHILIP H. GIDDENS